

U.S. DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

Analytical results and sample locality maps of stream-sediment, panned concentrate, stream-water, and soil samples from the Stuyahok study area, part of Holy Cross A-4 and A-5 quadrangles, Alaska

by

Elizabeth A. Bailey<sup>1</sup>, William J. Keith<sup>1</sup>, Damon Bickerstaff<sup>2</sup>, David Dempsey<sup>1</sup>  
and Marti L. Miller<sup>1</sup>

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<sup>1</sup>U.S. Geological Survey, Anchorage, Alaska

<sup>2</sup>Now with Placer Dome U.S., Inc., Anchorage, Alaska

## CONTENTS

INTRODUCTION .....	1
METHODS OF STUDY	
Sample Media.....	4
Sample Collection .....	4
Sample Preparation.....	5
Sample Analyses.....	5
Other samples .....	5
EXPLANATION OF DISKETTE FILE.....	6
ACKNOWLEDGMENTS .....	6
REFERENCES CITED .....	44

## ILLUSTRATIONS

Figure 1. Location of the Stuyahok study area, Holy Cross quadrangle, southwest Alaska.....	2
Figure 2. Geologic map of the Stuyahok study area, southcentral Holy Cross quadrangle, Alaska .....	3
Figure 3. Sample location map for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995 .....	10
Figure 4. Sample location map for panned-concentrate samples collected in the Stuyahok study area in 1995 .....	25
Figure 5. Sample location map for stream-water samples collected in the Stuyahok study area in 1995.....	27
Figure 6. Sample location map for soil samples collected in the Stuyahok study area in 1995 .....	29
Figure 7. Sample location map for stream-sediment and soil samples from the Stuyahok study area collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 .....	38
Figure 8. Sample location map for stream-sediment and soil samples from the Stuyahok study area originally collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 and re-analyzed by Bondar-Clegg in 1989 .....	41

## TABLES

Table 1. Analytical methods used with lower and upper limits of determination and reporting units for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples and soil samples collected in the Stuyahok study area in 1995.....	7
Table 2. Lower and upper limits of determination and reporting units for panned concentrate samples collected in the Stuyahok study area in 1995 .....	8
Table 3. Anions measured, their lower limits of determination, and reporting units for stream-water samples collected in the Stuyahok study area in 1995.....	8
Table 4. Analytical methods used, lower limits of determination, and reporting units for stream-sediment and soil samples from the Stuyahok study area collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975.....	9

Table 9. Geochemical data for soil samples collected in the Stuyahok study area in 1995 .....	30
Table 10. Geochemical data for stream-sediment and soil samples from the Stuyahok study area collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 .....	39
Table 11. Geochemical data for stream-sediment and soil samples from the Stuyahok study area originally collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 and re-analyzed by Bondar-Clegg in 1989 .....	42

#### DISKETTE FILE

STUYAHOK GEOCHEMISTRY: Tables of geochemical data for stream-sediment; panned-concentrate, and stream-water samples from the Stuyahok study area. Written in Microsoft EXCEL for PCs, version 4.3 on a 3 1/2-inch diskette .....	in pocket
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## INTRODUCTION

In August 1995 we conducted a geologic mapping and geochemical survey of the area surrounding the Stuyahok River-Flat Creek gold deposits in southwest Alaska. This report presents the results from stream-sediment, panned-concentrate, stream-water, and soil samples collected for this effort. Data from rock samples collected for this study are presented in Keith and others, 1996. A mineral resource assessment based on data from these reports, field observations, and other reports is presented in Miller and others, 1996.

The Stuyahok study area covers about 55-mi<sup>2</sup> (142-km<sup>2</sup>) in the Ilivit Mountains, north of the Yukon River in the south-central portion of the Holy Cross 1:250,000-scale quadrangle map (fig.1). The study area straddles the boundary between the Holy Cross A-4 and A-5 quadrangles (scale = 1:63,360). The topographic relief ranges from about 400 ft (122 m) to 1890 ft (576 m). The region has a continental climate, with short, warm summers and long, very cold winters. Average winter temperature ranges from about -18°C to -11°C, whereas average summer temperatures range from about 8°C to 17°C. Mean annual precipitation ranges from 250 mm to 550 mm with contribution from snowfall averaging from about 125 cm to 205 cm (Gallant and others, 1995).

The Stuyahok study area lies in region classified as an interior forested lowlands and uplands ecosystem (Gallant and others, 1995). Black spruce forests are commonly found on the floodplain terraces and on the flat to rolling uplands. The understory in these areas is primarily Labrador tea, prickly rose, blueberry, cranberry, and resin birch. Tall shrub communities, consisting of mostly willow species and alder, cover much of the floodplains and stream-banks and areas near timberline. North-facing slopes are predominately covered by low scrub communities consisting mostly of small willow species, small birch species, and alders with understory of blueberry, cranberry, Labrador tea, and patchy to continuous moss cover.

Soils in the study area are predominantly pergelic cryumbrepts or histic pergelic cryaquepts (Rieger and others, 1979). Pergelic cryumbrepts are well drained soils on slopes and ridges above tree line. These soils formed in shattered residual and colluvial material over bedrock. Histic pergelic cryaquept soils are poorly drained soils that occur on steep north-facing slopes and in the rolling valley bottoms. These soils formed mostly from colluvial material but also have some residual material at high elevations. Typically these soils have a thick peaty surface mat over mottled gray gravelly loam or silt loam.

The study area is underlain by igneous and sedimentary rocks of Cretaceous and Tertiary age. The bedrock units are overlapped by unconsolidated Quaternary deposits, which comprise about 70 percent of the surface exposure. Early Cretaceous tuffs, volcanic agglomerate, flows, and sedimentary rocks of the Koyukuk terrane form the main bedrock units. These rocks are intruded locally by felsic to mafic dikes of Late Cretaceous and early Tertiary age. The area is cut by numerous high-angle faults. The geology is described in detail by Miller and others (1996). A simplified geologic map (from Miller and others, 1996) is shown in figure 2.

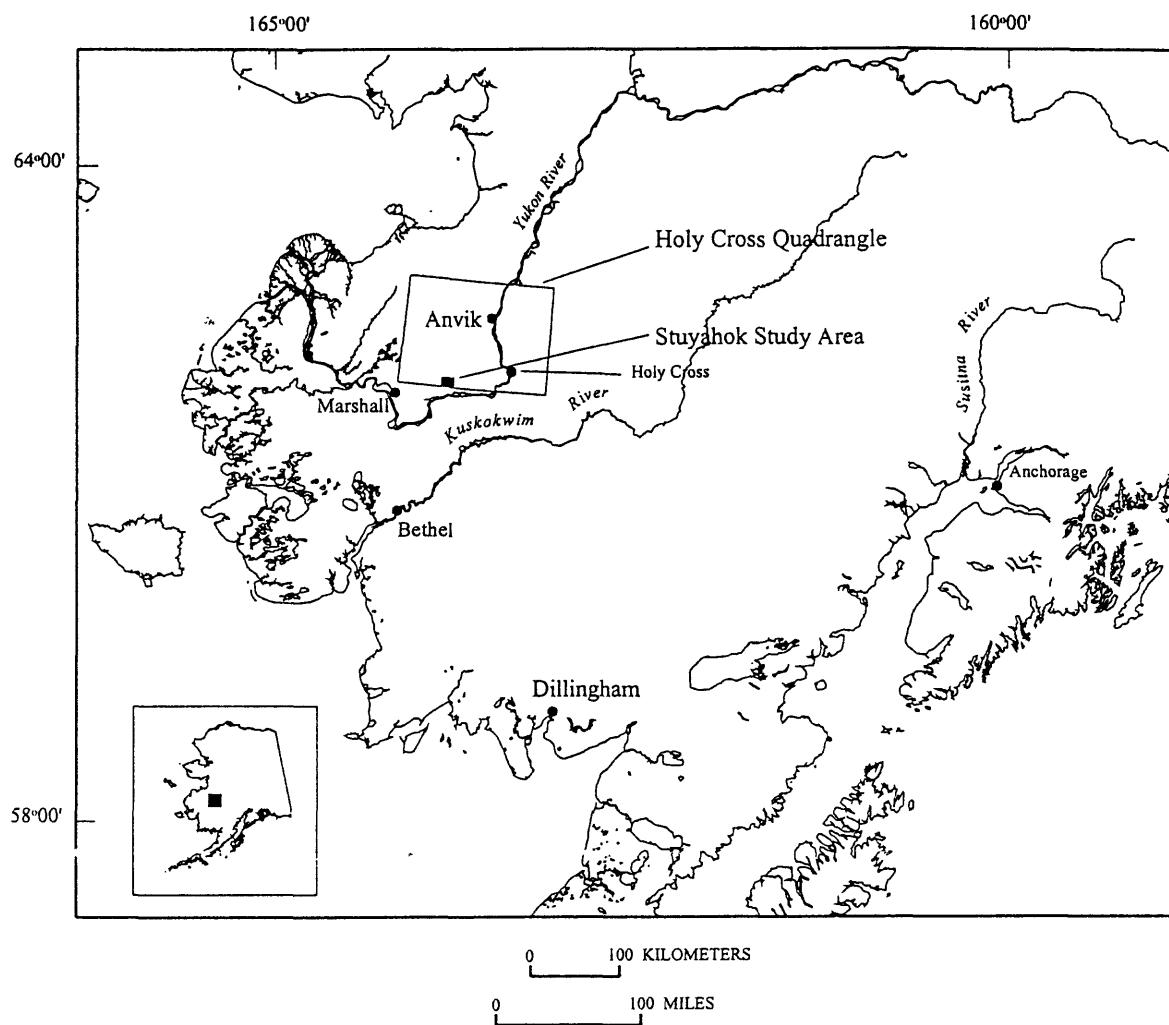


Figure 1. Location of the Stuyahok study area, Holy Cross quadrangle, southwest Alaska

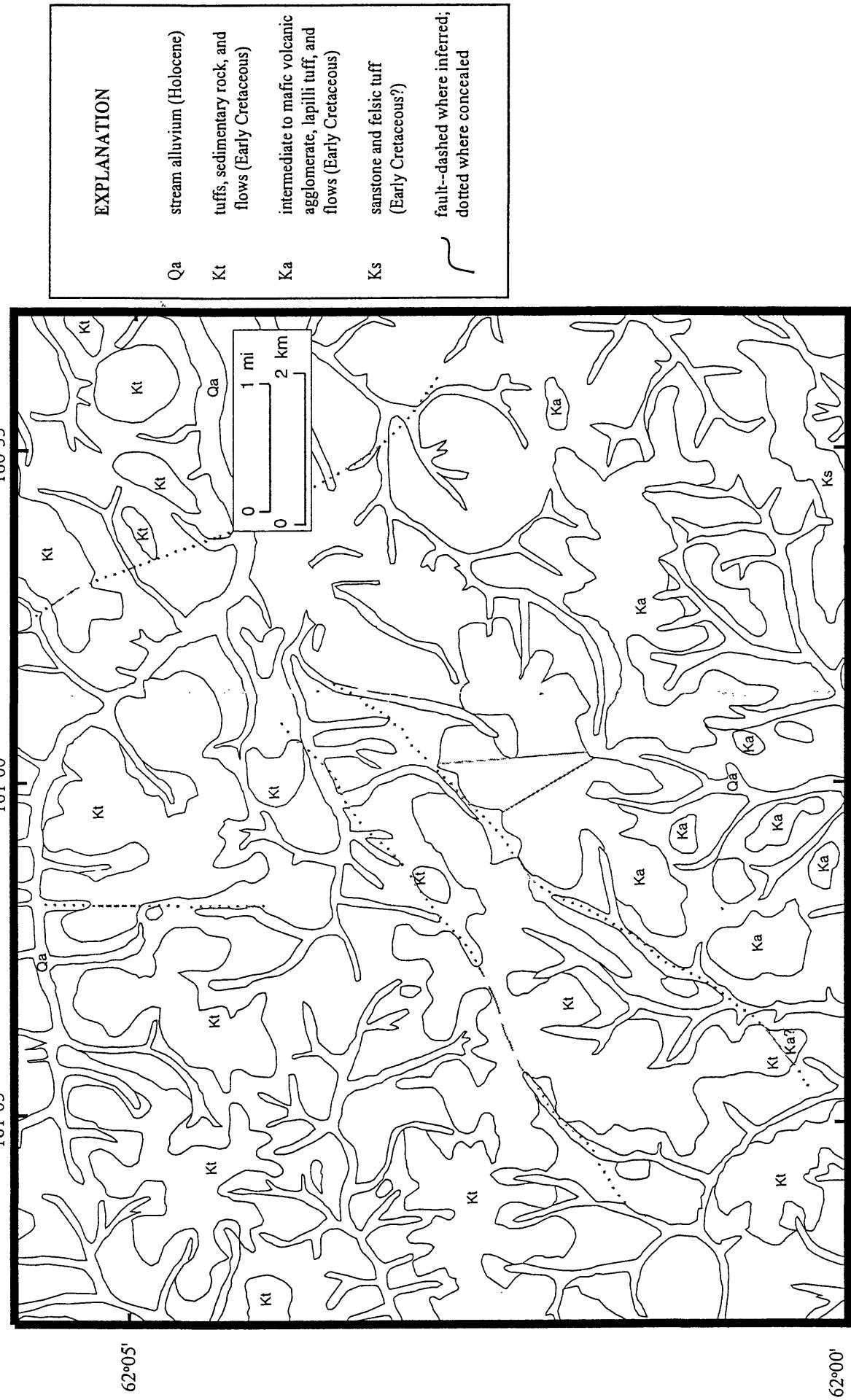


Figure 2. Simplified geologic map of the Stuyahok study area, south-central Holy Cross quadrangle (from Miller and others, 1996).

## METHODS OF STUDY

### Sample Media

Analyses of the stream-sediment samples represent the chemistry of the rock material eroded from the drainage basin upstream from each sample site. Such information is useful in identifying those basins which contain concentrations of elements that may be related to mineral deposits. Panned concentrate samples provide information about the chemistry of certain minerals in rock material eroded from the drainage basin upstream from each sample site. The selective concentration of heavy minerals, many of which may be ore related, permits determination of some elements that are not easily detected in stream-sediment samples. Geochemical data from soil samples is useful in locating potentially localized suboutcropping mineralized areas.

### Sample Collection

We collected stream-sediment samples at 42 sites (fig. 3) in the Stuyahok study area. The stream-sediment samples consisted of active alluvium collected from primarily first-order (unbranched) and second-order (below the junction of two first-order) streams as shown on USGS topographic maps Holy Cross A4 and A5 (scale = 1:63,360). About 500 grams of sediment was composited from several places within an area that may extend as much as 10 meters from the site plotted on Figure 3. Each sample was saved for analysis in a 5½ inch x 10½ inch polyethylene fiber bag.

At many (33) of the stream-sediment sites, we collected panned-concentrate samples (fig. 4) from the same active alluvium as the stream-sediment samples. For each sample, a 14 inch stainless steel gold pan was filled with sediment that was screened to 2.0 mm (-10-mesh) to remove coarse material. The sieved material was panned until most of the quartz, feldspar, organic material, clay sized particles were removed. The remaining fraction, approximately 50 grams, was saved for analysis in a 4 inch x 4 inch plastic zip-lock bag.

Where water was available we collected stream-water samples the same sites (38, fig. 5) as the stream-sediment and panned-concentrate samples were collected. Each sample was collected in a 60 ml polyethylene bottle using a disposable plastic syringe and filtering the water through a 0.2 µm disposable filter. A new 60 ml bottle, syringe, and filter was used for each sample. Sample collection bottles and syringes were rinsed 3 times with stream-water prior to filling. Water samples were held at 4°C ( $\pm 2^\circ\text{C}$ ) prior to analysis. Stream-water temperature (°C), pH, conductivity (µS/cm), and oxidation-reduction potential (mV) were measured at each site.

We collected 111 soil samples at 25, 50, or 100 foot intervals along 11 transects that ranged anywhere from 250 feet to 1300 feet long (fig. 6) depending on local conditions. Most samples were collected using a hand operated 3 foot long by 1½ inch diameter chrome plated steel soil auger. In a few locations soil samples were collected using a gas powered 6 inch diameter soil auger. The samples were saved for analysis in 5½ inch by 10½ inch polyethylene fiber bags.

## **Sample Preparation**

All solid samples collected in August, 1995 for this study were prepared and analyzed by Chemex Labs, Vancouver, BC, Canada. Stream-water samples required no preparation and were analyzed by Quanterra Environmental Services, Arvada, CO within 28 days of collection. Stream-sediment samples were air dried and then sieved to 3 size fractions: 1) -35 mesh, 2) -80 mesh, and 3) -200 mesh using stainless-steel sieves. The portions passing through the sieves were saved for separate analyses. The -35 mesh and -80 mesh fractions were pulverized to approximately -150 mesh using a zircon ring mill prior to analysis. After air drying, panned concentrate samples were sieved to -35 mesh using a stainless-steel screen then pulverized to approximately -150 mesh using a zircon ring mill. After air drying, soil samples were pulverized to approximately -150 mesh using a zircon ring mill.

## **Sample Analyses**

The stream-sediment and soil samples were analyzed for 32 elements by inductively coupled plasma-atomic emission spectrometry (ICP-AES) following a nitric acid-aqua regia digestion. The elements determined, their determination limits, and reporting units are listed in table 1. These samples were analyzed for gold using a fire assay followed by atomic absorption spectrometry (FA-AAS) detection technique. Mercury concentration was also measured using cold vapor atomic absorption spectrometry (CVAAS). The determination limits and reporting units for gold and mercury are also listed in table 1.

The panned concentrate samples were analyzed for 14 elements by neutron activation analysis (NAA). The elements determined, their determination limits, and reporting units are listed in table 2. The stream-water samples were analyzed for chloride ( $\text{Cl}^-$ ), fluoride ( $\text{F}^-$ ), and sulfate ( $\text{SO}_4^{2-}$ ) anion concentration directly by ion specific electrode chromatography (ISE). Analytical determination limits and reporting units are shown in table 3.

Geochemical data for the -35 mesh, -80 mesh, and -200 mesh stream-sediment samples are listed in table 6; sample locations are plotted on figure 3. Geochemical data for the panned-concentrate samples are listed in table 7; sample locations are plotted on figure 4. Stream-water analyses are listed in table 8; sample locations are plotted on figure 5. Geochemical data for soil samples are listed in table 9; sample locations are plotted on figure 6.

## **Other samples**

Previously unpublished geochemical data from stream-sediment and soil samples collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 are presented in this report. A subset of these samples was re-analyzed by Bondar-Clegg for selected elements in 1989 and is also presented here. The RAA and Bondar-Clegg geochemical data are used with permission from Calista Corporation. Analytical methods used, lower limits of determination, and reporting units for these data are listed in tables 4 and 5. Geochemical data are listed in tables 10 and 11. Sample locations are plotted on figures 7 and 8.

## **EXPLANATION OF DISKETTE FILES**

The 3 and 1/2-inch diskette included with this report includes all of the data from this report. Also included are descriptions of most of the samples collected in August 1995. The files are in Microsoft EXCEL for PCs, version 4.3 format. 1995seds.XLS contains the data listed in table 6. 1995conc.XLS contains the data listed in table 7. 1995h2o.XLS contains the data listed in table 8. 1995soil.XLS contains the data listed in table 9. 1975seds.XLS contains the data listed in table 10. 1989seds.XLS contains the data listed in table 11.

## **ACKNOWLEDGMENTS**

We thank June McAtee and Larry Tinker of Calista Corporation for assisting with the field sampling program and for providing field camp support.

Table 1. Analytical methods used with lower and upper limits of determination and reporting units for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples and soil samples collected in the Stuyahok study area in 1995

[ICP-AES, inductively-coupled plasma atomic-emission spectroscopy; FA-AAS, fire assay with atomic absorption spectrometry detection; CVAAS, cold-vapor atomic-absorption spectrometry; ppb, parts per million; ppm, parts per million; all samples analyzed by Chemex Labs, Vancouver, BC, Canada]

Element	ICP-AES		FA-AAS		CVAAS	
	lower limit	upper limit	lower limit	upper limit	lower limit	upper limit
gold (Au)			5 ppb	10,000 ppb		
silver (Ag)	0.2 ppm	200 ppm				
aluminum (Al)	0.01%	15.00%				
arsenic (As)	2 ppm	10,000 ppm				
barium (Ba)	10 ppm	10,000 ppm				
beryllium (Be)	0.5 ppm	100.0 ppm				
bismuth (Bi)	2 ppm	10,000 ppm				
calcium (Ca)	0.01%	15.00%				
cadmium (Cd)	0.5 ppm	100.0 ppm				
cobalt (Co)	1 ppm	10,000 ppm				
chromium (Cr)	1 ppm	10,000 ppm				
copper (Cu)	1 ppm	10,000 ppm				
iron (Fe)	0.01%	15.00%				
gallium (Ga)	10 ppm	10,000 ppm				
mercury (Hg)					10 ppb	10,000 ppb
potassium (K)	0.01%	10.00%				
lanthanum (La)	10 ppm	10,000 ppm				
magnesium (Mg)	0.01%	15.00%				
manganese (Mn)	5 ppm	10,000 ppm				
molybdenum (Mo)	1 ppm	10,000 ppm				
sodium (Na)	0.01%	5.00%				
nickel (Ni)	1 ppm	10,000 ppm				
phosphorus (P)	10 ppm	10,000 ppm				
lead (Pb)	2 ppm	10,000 ppm				
antimony (Sb)	2 ppm	10,000 ppm				
scandium (Sc)	1 ppm	10,000 ppm				
strontium (Sr)	1 ppm	10,000 ppm				
titanium (Ti)	0.01%	5.00%				
thallium (Tl)	10 ppm	10,000 ppm				
uranium (U)	10 ppm	10,000 ppm				
vanadium (V)	1 ppm	10,000 ppm				
tungsten (W)	10 ppm	10,000 ppm				
zinc (Zn)	2 ppm	10,000 ppm				

Table 2. Lower and upper limits of determination and reporting units for panned concentrate samples collected in the Stuyahok study area in 1995

[All samples were analyzed by neutron activation analysis by Chemex Labs, Vancouver, BC, Canada; ppb, parts per billion; ppm, parts per million]

Element	Lower limit	Upper Limit
Gold (Au)	10 ppb	10,000 ppb
Silver (Ag)	10 ppm	10,000 ppm
Arsenic (As)	2 ppm	10,000 ppm
Bromine (Br)	2 ppm	10,000 ppm
Cobalt (Co)	20 ppm	10,000 ppm
Chromium (Cr)	100 ppm	10,000 ppm
Molybdenum (Mo)	5 ppm	10,000 ppm
Antimony (Sb)	1 ppm	10,000 ppm
Tungsten (W)	5 ppm	10,000 ppm

Table 3. Anions measured, their lower limits of determination, and reporting units for stream-water samples collected in the Stuyahok study area in 1995

[All samples were analyzed by ion-specific-electrode chromatography by Quanterra Environmental Services, Arvada, CO; mg/L, milligrams per Liter]

Anion	lower limit
Chloride (Cl <sup>-</sup> )	0.50 mg/L
Fluoride (F <sup>-</sup> )	0.50 mg/L
Sulfate (SO <sub>4</sub> <sup>2-</sup> )	0.50 mg/L

Table 4. Analytical methods used, lower limits of determination, and reporting units for stream-sediment and soil samples from the Stuyahok study area collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975

[ppb, parts per billion; ppm, parts per million]

Element	lower limit
Gold (Au)	0.1 ppm
Silver (Ag)	
Arsenic (As)	10 ppm
Copper (Cu)	
Mercury (Hg)	
Molybdenum (Mo)	
Lead (Pb)	
Zinc (Zn)	

Table 5. Analytical methods used, lower limits of determination, and reporting units for stream-sediment and soil samples from the Stuyahok study area originally collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 and re-analyzed by Bondar-Clegg in 1989

[ppb, parts per billion; ppm, parts per million]

Element	lower limit
Gold (Au)	5 ppb
Silver (Ag)	0.2 ppm
Arsenic (As)	
Bismuth (Bi)	
Cobalt (Co)	
Chromium (Cr)	
Copper (Cu)	
Manganese (Mn)	
Molybdenum (Mo)	1 ppm
Nickel (Ni)	
Lead (Pb)	
Antimony (Sb)	
Selenium (Se)	5 ppm
Tungsten (W)	10 ppm
Zinc (Zn)	
Mercury (Hg)	
Barium (Ba)	



Figure 3. Sample location map for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

Table 6. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahtok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion; parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-30 mesh Au (ppb)	-80 mesh Au (ppb)	-200 mesh Au (ppb)	-30 mesh Ag (ppm)	-80 mesh Ag (ppm)	-200 mesh Ag (ppm)	-30 mesh Al (%)	-80 mesh Al (%)	-200 mesh Al (%)	-30 mesh As (ppm)	-80 mesh As (ppm)	-200 mesh As (ppm)	-30 mesh Ba (ppm)	-80 mesh Ba (ppm)	-200 mesh Ba (ppm)
5AEB001	1	62,03,32	161,00,17	HC-A5	<5	<5	<5	0.2	0.2	0.2	3.33	2.74	2.16	626	828	912	190	170	170
5AEB002	2	62,03,22	161,01,00	HC-A5	<5	<5	<5	<2	<2	3.25	2.51	2.47	36	14	12	180	160	160	
5AEB003A	3A	62,03,33	161,00,25	HC-A5	<5	<5	<5	0.4	0.2	2.50	1.93	1.76	14	8	8	210	160	160	
5AEB003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
5AEB004	4	62,03,31	161,00,46	HC-A5	<5	<5	<5	<2	<2	3.76	2.69	2.31	26	14	14	230	180	180	
5AEB005	5	62,03,33	161,00,52	HC-A5	<5	<5	<5	<2	<2	2.94	3.67	3.82	6	8	30	180	230	230	
5AEB006	6	62,03,38	160,59,32	HC-A4	<5	<5	<5	<2	<2	2.40	2.00	1.94	78	46	24	370	300	300	
5AEB007	7	62,03,42	160,59,10	HC-A4	<5	<5	<5	<2	<2	2.43	1.96	2.17	32	16	16	290	230	230	
5AEB008	8	62,03,41	160,59,00	HC-A4	<5	<5	<5	0.4	0.4	3.60	3.45	3.10	110	92	96	170	220	220	
5AEB009	9	62,03,01	160,56,14	HC-A4	<5	<5	<5	<2	<2	3.96	3.66	2.53	38	38	28	200	210	210	
5AEB010	10	62,01,43	161,02,01	HC-A5	<5	<5	<5	<2	<2	3.81	3.53	3.32	68	64	74	150	150	150	
5AEB011	11	62,01,39	161,01,56	HC-A5	<5	<5	<5	<2	<2	4.00	2.88	2.88	40	22	18	160	130	130	
5AEB012	12	62,01,16	161,03,23	HC-A5	<5	<5	<5	<2	<2	3.62	3.14	2.51	6	4	4	240	200	200	
5AEB013	13	62,01,49	161,05,21	HC-A5	<5	<5	<5	<2	<2	2.52	2.24	2.35	2	0	0	160	150	150	
5AEB015	15	62,01,13	161,05,41	HC-A5	<5	<5	<5	<2	<2	2.61	2.31	2.24	12	4	2	280	250	250	
5AEB016	16	62,01,41	161,06,15	HC-A5	<5	<5	<5	<2	<2	2.90	2.74	2.68	16	14	20	280	270	270	
5AEB017	17	62,01,41	161,06,15	HC-A5	<5	<5	<5	<2	<2	3.00	2.75	2.73	14	8	20	290	280	280	
5AEB018	18	62,01,34	161,07,10	HC-A5	<5	<5	<5	<2	<2	3.33	2.84	2.84	16	14	6	340	290	290	
5AEB019	19	62,03,40	161,06,26	HC-A5	<5	<5	<5	<2	<2	3.89	4.05	4.16	26	32	52	120	140	140	
5AEB020	20	62,03,40	161,06,34	HC-A5	<5	<5	<5	<2	<2	3.40	3.26	3.44	26	22	46	140	130	130	
5AEB021	21	62,03,25	161,06,41	HC-A5	<5	<5	<5	<2	<2	4.25	3.34	2.61	24	6	16	350	280	280	
5AEB022	22			HC-A5	<5	<5	<5	<2	<2	3.84	3.30	2.76	4	8	6	320	250	250	
5AEB023	23	62,03,40	161,05,06	HC-A5	<5	<5	<5	<2	<2	4.02	4.35	4.31	12	14	20	310	340	340	
5AEB024	24	62,03,30	161,04,33	HC-A5	<5	<5	<5	<2	<2	3.45	2.59	2.55	12	10	4	200	140	140	
5AEB025	25	62,03,25	161,03,27	HC-A5	<5	<5	<5	<2	<2	3.67	2.89	2.44	24	16	16	260	210	210	
5AEB026	26	62,05,11	161,07,38	HC-A5	<5	<5	<5	<2	<2	3.91	3.65	3.15	18	12	14	160	160	160	
5AEB027	27	62,05,11	161,07,38	HC-A5	<5	<5	<5	<2	<2	3.54	3.29	3.06	16	6	18	140	150	150	
5AEB028	28	62,05,12	160,59,59	HC-A4	<5	<5	<5	<2	<2	3.02	3.04	2.97	6	6	6	260	260	260	
5AEB029	29	62,04,24	160,57,48	HC-A4	<5	<5	<5	<2	<2	3.01	3.23	2.84	6	12	14	210	220	220	
5AEB030	30	62,02,39	160,56,59	HC-A4	<5	<5	<5	0.2	0.2	3.76	2.91	2.29	180	154	106	180	170	170	
5AEB031	31	62,02,39	160,57,03	HC-A4	<5	<5	<5	1.8	2.8	4.4	1.25	1.76	2.38	108	122	128	160	160	160
5AEB032	32	62,02,32	160,56,35	HC-A4	<5	<5	<5	<2	<2	3.26	3.50	2.97	20	16	16	280	310	310	
5AEB033	33	62,00,57	160,57,35	HC-A4	<5	<5	<5	<2	<2	3.88	2.70	2.78	20	12	8	180	160	160	

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion; parts per million; < less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh
					Au (ppb)	Au (ppb)	Au (ppb)	Ag (ppm)	Ag (ppm)	Ag (ppm)	Al (%)	Al (%)	Al (%)	As (ppm)	As (ppm)
5AEb034	34	62, 00, 50	161,00,34	HC-A5	<5	<5	<5	<2	<2	<2	3.06	3.73	3.78	10	8
5AEb035	35	62,00,37	160,56,13	HC-A4	<5	<5	<5	<2	<2	<2	4.41	3.60	2.54	40	28
5AEb036	36	62,00,37	160,55,54	HC-A4	<5	<5	<5	<2	<2	<2	1.76	1.29	1.51	2	0
5AEb037	37	62,03,63	161,02,28	HC-A5	<5	<5	<5	<2	<2	<2	2.42	3.06	3.27	8	22
5AEb038	38	62,03,36	161,01,43	HC-A5	<5	<5	<5	<2	<2	<2	3.32	3.92	3.98	8	18
5AEb039	39	62,03,32	161,01,08	HC-A5	<5	<5	<5	<2	<2	<2	2.41	1.90	1.84	12	0
5AEb040	40	62,03,36	161,01,05	HC-A5	<5	<5	<5	<2	<2	<2	2.29	2.18	2.14	4	4
5AEb041	41	62,03,27	160,57,26	HC-A4	10	10	15	1.2	1.6	1.6	3.64	2.44	1.92	96	44
5AEb042	42	62,03,27	160,57,24	HC-A4	<5	<5	<5	<2	<2	<2	3.04	2.42	2.35	54	46
5AEb043	43	62,03,54	160,58,26	HC-A4	25	1,080	<5	0.2	<2	<2	2.70	2.64	2.29	40	54
1073	44			HC-A5	--	<5	--	--	--	--	4.30	--	--	--	--

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-200 mesh Ba (ppm)	-80 mesh Be (ppm)	-200 mesh Bi (ppm)	-80 mesh Ca (ppm)	-200 mesh Cd (ppm)	-80 mesh Ca (%)	-200 mesh Cd (ppm)	-80 mesh Ca (%)	-200 mesh Cd (ppm)	-80 mesh Co (ppm)	-200 mesh Co (ppm)	-30 mesh Co (ppm)	
5AEB001	1	62,03,32	161,00,17	HC-A5	180	<5	4	2	1	0.48	0.58	0.57	1.5	2.0	2.0	20	
5AEB002	2	62,03,22	161,01,00	HC-A5	170	0.5	<5	2	1	0.87	0.56	0.52	0.5	<.5	<.5	23	
5AEB003A	3A	62,03,33	161,00,25	HC-A5	170	<5	<5	2	1	0.43	0.43	0.43	0.5	<.5	<.5	15	
5AEB003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--	--	--	--	--	--	--	
5AEB004	4	62,03,31	161,00,46	HC-A5	170	0.5	<5	1	1	0.90	0.58	0.47	0.5	<.5	<.5	19	
5AEB005	5	62,03,33	161,00,52	HC-A5	250	0.5	0.5	1	1	1.11	1.44	<.5	0.5	17	17	46	
5AEB006	6	62,03,38	160,59,32	HC-A4	280	1.0	0.5	2	1	0.36	0.32	0.34	0.5	<.5	<.5	14	
5AEB007	7	62,03,42	160,59,10	HC-A4	240	0.5	<5	1	2	0.55	0.46	0.47	<.5	<.5	<.5	25	
5AEB008	8	62,03,41	160,59,00	HC-A4	250	<5	<5	4	6	0.52	0.65	0.63	1.0	1.0	1.0	27	
5AEB009	9	62,03,01	160,56,14	HC-A4	190	<5	<5	2	2	1	0.80	0.66	0.47	<.5	<.5	<.5	
5AEB010	10	62,01,43	161,02,01	HC-A5	170	0.5	<5	4	2	2	0.88	0.95	0.96	0.5	0.5	0.5	22
5AEB011	11	62,01,39	161,01,56	HC-A5	130	<5	<5	1	1	2	0.68	0.39	0.36	<.5	<.5	<.5	15
5AEB012	12	62,01,16	161,03,23	HC-A5	160	0.5	<5	2	1	1	1.31	1.03	0.72	0.5	<.5	<.5	17
5AEB013	13	62,01,49	161,05,21	HC-A5	150	0.5	<5	1	1	1	0.72	0.56	0.52	<.5	<.5	<.5	8
5AEB015	15	62,01,13	161,05,41	HC-A5	230	0.5	0.5	1	2	1	0.68	0.63	0.57	<.5	<.5	<.5	14
5AEB016	16	62,01,41	161,06,15	HC-A5	230	0.5	0.5	2	1	1	0.87	0.76	0.63	<.5	<.5	<.5	17
5AEB017	17	62,01,41	161,06,15	HC-A5	270	0.5	0.5	1	1	2	0.94	0.77	0.67	0.5	<.5	<.5	18
5AEB018	18	62,01,34	161,07,10	HC-A5	270	0.5	0.5	2	1	1	1.06	0.84	0.74	<.5	<.5	<.5	14
5AEB019	19	62,03,40	161,06,26	HC-A5	170	<5	<5	1	2	2	1.41	1.33	1.24	0.5	<.5	<.5	22
5AEB020	20	62,03,40	161,06,34	HC-A5	150	<5	<5	1	2	1	1.58	1.34	1.33	<.5	<.5	<.5	18
5AEB021	21	62,03,25	161,06,41	HC-A5	220	0.5	<5	1	1	1	1.48	1.17	0.89	<.5	<.5	<.5	18
5AEB022	22	62,03,40	161,05,06	HC-A5	190	0.5	<5	1	1	2	1.78	1.32	0.96	0.5	<.5	<.5	16
5AEB023	23	62,03,30	161,04,33	HC-A5	320	0.5	0.5	1	2	1	1.50	1.75	1.83	<.5	<.5	<.5	22
5AEB024	24	62,03,25	161,03,27	HC-A5	130	0.5	<5	1	1	1	1.07	0.78	0.77	0.5	<.5	<.5	18
5AEB025	25	62,03,25	160,56,35	HC-A5	170	0.5	<5	1	2	1	1.09	0.88	0.69	0.5	<.5	<.5	18
5AEB026	26	62,05,11	161,07,38	HC-A5	170	0.5	<5	1	2	1	1.40	1.16	0.93	0.5	<.5	<.5	24
5AEB027	27	62,05,11	161,07,38	HC-A5	160	<5	<5	1	1	1	1.40	1.10	0.95	0.5	<.5	<.5	21
5AEB028	28	62,05,12	160,59,59	HC-A4	270	0.5	<5	1	2	1	1.12	1.05	1.03	<.5	<.5	<.5	14
5AEB029	29	62,04,24	160,57,48	HC-A4	190	<5	<5	1	1	1	0.92	0.95	0.81	<.5	<.5	<.5	15
5AEB030	30	62,02,39	160,56,59	HC-A4	160	<5	<5	2	1	2	0.74	0.66	0.58	0.5	<.5	<.5	25
5AEB031	31	62,02,39	160,57,03	HC-A4	220	<5	<5	1	1	1	0.23	0.42	0.63	<.5	1.0	4	4
5AEB032	32	62,02,32	160,56,35	HC-A4	320	<5	<5	2	1	1	0.84	0.91	0.79	0.5	<.5	<.5	25

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; < less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-200 mesh Ba (ppm)	-30 mesh Be (ppm)	-80 mesh Be (ppm)	-200 mesh Bi (ppm)	-30 mesh Bi (ppm)	-80 mesh Ca (%)	-200 mesh Ca (%)	-30 mesh Cd (ppm)	-80 mesh Cd (ppm)	-200 mesh Cd (ppm)	-30 mesh Co (ppm)	
SAEb033	33	62.00,57	160,57,35	HC-A4	180	<.5	<.5	2	1	0.94	0.63	0.65	<.5	<.5	24	
SAEb034	34	62.00,50	161,00,34	HC-A5	190	<.5	<.5	0.5	2	1	0.90	1.04	1.02	<.5	0.5	22
SAEb035	35	62.00,37	160,56,13	HC-A4	190	0.5	<.5	2	2	1.21	1.00	0.76	0.5	0.5	<.5	30
SAEb036	36	62.00,37	160,55,54	HC-A4	190	<.5	<.5	1	1	0.35	0.23	0.28	<.5	<.5	<.5	7
SAEb037	37	62.03,63	161,02,28	HC-A5	240	0.5	0.5	1	2	1	1.11	1.29	1.35	<.5	0.5	15
SAEb038	38	62.03,36	161,01,43	HC-A5	220	0.5	0.5	1	2	1	1.20	1.39	1.45	<.5	<.5	18
SAEb039	39	62.03,32	161,01,08	HC-A5	140	0.5	<.5	1	1	2	0.51	0.36	0.38	<.5	<.5	10
SAEb040	40	62.03,36	161,01,05	HC-A5	170	<.5	<.5	1	1	1	0.42	0.40	0.40	<.5	<.5	8
SAEb041	41	62.03,27	160,57,26	HC-A4	340	0.5	0.5	<.5	1	1	0.35	0.35	0.34	0.5	<.5	22
SAEb042	42	62.03,27	160,57,24	HC-A4	280	0.5	<.5	0.5	2	1	0.39	0.39	0.48	<.5	<.5	22
SAEb043	43	62.03,54	160,58,26	HC-A4	370	<.5	0.5	0.5	1	2	0.46	0.46	0.50	0.5	1.0	22
1073	44	--	--	--	<.5	--	--	<2	--	--	1.17	--	--	<.5	--	--

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-80 mesh Co (ppm)	-200 mesh Co (ppm)	-30 mesh Cr (ppm)	-80 mesh Cr (ppm)	-200 mesh Cr (ppm)	-30 mesh Cu (ppm)	-80 mesh Cu (ppm)	-200 mesh Cu (ppm)	-30 mesh Fe (%)	-80 mesh Fe (%)	-200 mesh Fe (%)	-30 mesh Hg (ppb)	-80 mesh Hg (ppb)	-200 mesh Hg (ppb)
5AEb001	1	62,03,32	161,00,17	HC-A5	16	13	54	37	28	37	31	22	5.98	5.83	4.88	70	70	110
5AEb002	2	62,03,22	161,01,00	HC-A5	13	10	27	27	30	41	23	21	5.97	3.73	3.16	60	60	70
5AEb003A	3A	62,03,33	161,00,25	HC-A5	11	9	38	28	28	29	24	20	4.28	3.22	2.71	140	100	110
5AEb003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--	--	--	--	--	--	--	--	
5AEb004	4	62,03,31	161,00,46	HC-A5	12	10	19	20	27	49	31	22	6.45	4.44	3.72	40	40	60
5AEb005	5	62,03,33	161,00,52	HC-A5	18	22	15	17	22	35	39	35	4.93	5.38	5.22	40	30	60
5AEb006	6	62,03,38	160,59,32	HC-A4	34	21	50	39	33	44	34	27	8.02	6.19	4.36	120	90	80
5AEb007	7	62,03,42	160,59,10	HC-A4	9	9	36	27	30	24	18	18	4.24	2.67	2.76	70	50	80
5AEb008	8	62,03,41	160,59,00	HC-A4	20	16	138	116	71	98	84	67	5.82	4.98	4.06	90	70	100
5AEb009	9	62,03,01	160,56,14	HC-A4	23	13	97	81	52	45	37	23	5.95	5.06	3.42	40	40	50
5AEb010	10	62,01,43	161,02,01	HC-A5	18	14	42	39	35	42	32	25	6.62	5.97	4.59	60	40	50
5AEb011	11	62,01,39	161,01,56	HC-A5	8	7	45	27	27	32	20	19	4.67	2.87	2.63	50	60	60
5AEb012	12	62,01,16	161,03,23	HC-A5	12	9	19	19	24	35	24	16	5.55	3.84	2.75	40	30	60
5AEb013	13	62,01,49	161,05,21	HC-A5	6	6	21	21	23	19	12	12	3.26	2.21	2.15	80	80	90
5AEb015	15	62,01,13	161,05,41	HC-A5	11	12	16	18	22	24	17	15	4.97	3.95	3.69	40	40	100
5AEb016	16	62,01,41	161,06,15	HC-A5	15	14	19	23	30	36	26	20	5.64	5.23	4.38	30	30	60
5AEb017	17	62,01,41	161,06,15	HC-A5	14	14	20	23	30	36	26	21	6.05	5.04	4.46	20	40	60
5AEb018	18	62,01,34	161,07,10	HC-A5	11	10	17	18	27	36	25	20	5.44	4.18	3.61	40	40	60
5AEb019	19	62,03,40	161,06,26	HC-A5	23	21	66	78	65	36	36	36	5.50	5.51	5.56	30	30	40
5AEb020	20	62,03,40	161,06,34	HC-A5	18	19	22	25	26	28	29	29	5.20	5.26	5.34	90	40	280
5AEb021	21	62,03,25	161,06,41	HC-A5	13	10	26	25	26	42	30	21	7.43	5.53	4.52	60	70	60
5AEb022	22	62,03,40	161,05,06	HC-A5	13	9	22	23	27	36	28	23	5.46	4.07	2.99	40	40	60
5AEb023	23	62,03,30	161,04,33	HC-A5	20	17	28	28	32	43	39	34	5.81	5.28	4.75	30	30	60
5AEb024	24	62,03,25	161,03,27	HC-A5	10	8	22	22	24	37	20	16	5.87	3.52	2.83	30	40	110
5AEb025	25	62,02,39	160,56,59	HC-A4	15	12	24	24	29	33	23	16	6.36	5.25	4.37	30	30	40
5AEb026	26	62,05,11	161,07,38	HC-A5	21	16	43	44	40	47	38	29	6.06	5.02	3.91	30	30	70
5AEb027	27	62,05,11	161,07,38	HC-A5	19	16	45	41	37	40	33	26	5.55	4.63	3.76	20	40	70
5AEb028	28	62,05,12	160,59,59	HC-A4	13	12	15	18	23	31	27	21	4.62	4.41	3.74	20	30	40
5AEb029	29	62,04,24	160,57,48	HC-A4	14	12	16	19	24	26	20	20	5.05	5.13	4.29	20	40	40
5AEb030	30	62,02,39	160,56,59	HC-A4	16	10	103	81	65	44	27	19	6.13	4.13	2.90	30	40	60
5AEb031	31	62,02,39	160,57,03	HC-A4	7	7	27	37	47	10	14	17	1.67	2.11	2.63	100	140	170
5AEb032	32	62,02,32	160,56,35	HC-A4	24	20	90	94	77	44	33	6.04	5.75	4.84	100	140	100	

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-80 mesh	-200 mesh	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh	-200 mesh			
				Co (ppm)	Cr (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Cu (ppm)	Cu (ppm)	Cu (ppm)	Fe (%)	Fe (%)	Hg (ppm)	Hg (ppm)			
5AEB033	33	62,00,57	160,57,35	HC-A4	10	7	66	37	46	19	18	6.50	3.06	2.75	80	60	60	
5AEB034	34	62,00,50	161,00,34	HC-A5	25	22	51	57	56	35	39	4.87	5.51	5.57	30	40	50	
5AEB035	35	62,00,37	160,56,13	HC-A4	23	13	56	51	40	48	34	20	8.11	6.05	4.34	240	80	60
5AEB036	36	62,00,37	160,55,54	HC-A4	6	6	24	19	22	15	11	12	2.22	1.66	1.87	80	90	30
5AEB037	37	62,03,63	161,02,28	HC-A5	19	20	13	16	22	25	30	27	4.99	6.12	5.94	30	50	50
5AEB038	38	62,03,36	161,01,43	HC-A5	16	15	17	18	22	41	38	30	5.58	5.49	4.65	30	30	50
5AEB039	39	62,03,32	161,01,08	HC-A5	8	6	29	25	25	27	19	18	3.28	2.26	2.23	70	60	90
5AEB040	40	62,03,36	161,01,05	HC-A5	7	7	30	28	28	20	18	17	2.61	2.52	2.44	60	60	40
5AEB041	41	62,03,27	160,57,26	HC-A4	1.2	9	22	20	23	37	26	17	6.66	4.18	2.77	370	330	340
5AEB042	42	62,03,27	160,57,24	HC-A4	16	13	69	49	39	32	24	22	5.99	4.68	4.54	90	120	70
5AEB043	43	62,03,54	160,58,26	HC-A4	29	24	90	71	48	36	40	31	4.82	5.50	4.63	60	40	60
1073	44			HC-A5	15	--	--	25	--	--	60	--	--	3.82	--	--	--	

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-35 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh
				K (%)	Mg (%)	Mg (%)	Mg (%)	Mn (ppm)	Mn (ppm)	Mn (ppm)	Mo (ppm)	Mo (ppm)
5AEB001	1	62,03,32	161,00,17	HC-A5	0.09	0.04	0.05	1.61	0.98	0.48	1,120	1,160
5AEB002	2	62,03,22	161,01,00	HC-A5	0.08	0.09	0.10	0.89	0.51	0.45	1,130	685
5AEB003A	3A	62,03,33	161,00,25	HC-A5	0.09	0.04	0.06	1.03	0.70	0.49	950	570
5AEB003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--	620	485
5AEB004	4	62,03,31	161,00,46	HC-A5	0.07	0.05	0.06	0.97	0.61	0.46	725	455
5AEB005	5	62,03,33	161,00,52	HC-A5	0.07	0.08	0.11	0.74	0.79	0.63	875	1,100
5AEB006	6	62,03,38	160,59,32	HC-A4	0.12	0.06	0.07	0.54	0.45	0.45	2,010	1,465
5AEB007	7	62,03,42	160,59,10	HC-A4	0.13	0.06	0.07	0.50	0.42	0.44	875	435
5AEB008	8	62,03,41	160,59,00	HC-A4	0.10	0.12	0.13	2.41	1.65	1.04	985	820
5AEB009	9	62,03,01	160,56,14	HC-A4	0.05	0.04	0.05	2.42	1.94	0.94	475	425
5AEB010	10	62,01,43	161,02,01	HC-A5	0.08	0.04	0.06	1.83	1.34	0.80	1,025	1,080
5AEB011	11	62,01,39	161,01,56	HC-A5	0.09	0.05	0.06	1.44	0.54	0.47	1,005	600
5AEB012	12	62,01,16	161,03,23	HC-A5	0.07	0.08	0.09	1.00	0.69	0.45	860	565
5AEB013	13	62,01,49	161,05,21	HC-A5	0.08	0.07	0.09	0.44	0.34	0.35	650	395
5AEB015	15	62,01,13	161,05,41	HC-A5	0.09	0.04	0.04	0.57	0.44	0.39	695	715
5AEB016	16	62,01,41	161,06,15	HC-A5	0.09	0.07	0.09	0.65	0.52	0.44	1,020	1,065
5AEB017	17	62,01,41	161,06,15	HC-A5	0.08	0.09	0.12	0.68	0.52	0.46	1,090	990
5AEB018	18	62,01,34	161,07,10	HC-A5	0.08	0.08	0.11	0.77	0.57	0.47	855	655
5AEB019	19	62,03,40	161,06,26	HC-A5	0.04	0.04	0.05	2.41	2.35	2.05	910	605
5AEB020	20	62,03,40	161,06,34	HC-A5	0.06	0.03	0.05	1.13	1.12	0.96	980	1,025
5AEB021	21	62,03,25	161,06,41	HC-A5	0.08	0.05	0.05	1.31	0.91	0.60	760	645
5AEB022	22	62,03,40	161,05,06	HC-A5	0.08	0.06	0.06	1.04	0.77	0.55	635	510
5AEB023	23	62,03,30	161,04,33	HC-A5	0.08	0.09	0.12	1.35	1.20	0.90	1,040	1,025
5AEB024	24	62,03,25	161,03,27	HC-A5	0.07	0.04	0.05	0.38	0.54	0.50	955	440
5AEB025	25	62,05,11	161,07,38	HC-A5	0.04	0.05	0.08	1.68	1.36	0.81	920	830
5AEB026	26	62,05,11	161,07,38	HC-A5	0.04	0.03	0.08	1.57	1.24	0.82	750	705
5AEB027	27	62,05,11	161,07,38	HC-A5	0.04	0.06	0.07	0.70	0.64	0.50	595	615
5AEB028	28	62,05,12	160,59,59	HC-A4	0.09	0.06	0.07	0.70	0.79	0.54	675	740
5AEB029	29	62,04,24	160,57,48	HC-A4	0.08	0.06	0.07	0.79	0.73	0.54	685	455
5AEB030	30	62,02,39	160,56,59	HC-A4	0.07	0.04	0.05	2.29	1.36	0.70	740	380
5AEB031	31	62,02,39	160,57,03	HC-A4	0.22	0.19	0.24	0.24	0.37	0.41	235	315
5AEB032	32	62,02,32	160,56,35	HC-A4	0.04	0.06	0.10	1.98	1.85	1.20	865	870

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion; parts per million; < less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadangle (Holy Cross)	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh	-200 mesh	-30 mesh	-80 mesh
				K (%)	Mg (%)	Mg (%)	Mg (%)	Mn (%)	Mn (%)	Mn (%)	Mo (ppm)	Mo (ppm)	Mo (ppm)	Na (ppm)	Na (ppm)
SAEB033	33	62,00,57	160,57,35	HC-A4	0.04	0.07	0.11	2.06	0.67	0.52	780	350	330	1	<1
SAEB034	34	62,00,50	161,00,34	HC-A5	0.04	0.06	0.06	1.63	1.78	1.39	600	725	890	<1	<1
SAEB035	35	62,00,37	160,56,13	HC-A4	0.05	0.04	0.06	2.10	1.43	0.74	560	440	360	<1	<1
SAEB036	36	62,00,37	160,55,54	HC-A4	0.12	0.04	0.04	0.36	0.30	0.35	260	165	175	<1	<1
SAEB037	37	62,03,63	161,02,28	HC-A5	0.07	0.05	0.08	0.55	0.65	0.56	835	1,170	1,355	<1	1
SAEB038	38	62,03,36	161,01,43	HC-A5	0.06	0.05	0.07	0.97	0.87	0.64	985	1,180	1,160	<1	1
SAEB039	39	62,03,32	161,01,08	HC-A5	0.11	0.06	0.06	0.48	0.46	0.45	355	195	170	<1	<1
SAEB040	40	62,03,36	161,01,05	HC-A5	0.11	0.11	0.12	0.50	0.48	0.46	350	335	300	<1	<1
SAEB041	41	62,03,27	160,57,26	HC-A4	0.18	0.08	0.06	0.60	0.38	0.32	750	390	385	1	<1
SAEB042	42	62,03,27	160,57,24	HC-A4	0.08	0.04	0.06	1.67	1.11	0.69	585	460	495	<1	<1
SAEB043	43	62,03,54	160,58,26	HC-A4	0.10	0.06	0.08	1.57	1.33	0.73	1,215	1,620	1,445	1	2
1073	44			HC-A5	--	0.13	--	1.15	--	--	905	--	--	<1	--
															0.08

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-200 mesh Na (%)	-80 mesh Ni (ppm)	-200 mesh Ni (ppm)	-30 mesh P (ppm)	-80 mesh P (ppm)	-200 mesh Pb (ppm)	-30 mesh Pb (ppm)	-80 mesh Pb (ppm)	-200 mesh Sb (ppm)	-30 mesh Sb (ppm)	-80 mesh Sb (ppm)	-200 mesh Sc (ppm)	-30 mesh Sc (ppm)
5AEB001	1	62,03,32	161,00,17	HC-A5	0.01	36	24	18	740	960	1,140	44	38	32	<	<	9
5AEB002	2	62,03,22	161,01,00	HC-A5	0.02	23	18	18	850	820	930	18	10	8	<	<	4
5AEB003A	3A	62,03,33	161,00,25	HC-A5	0.01	24	18	18	1,080	1,040	1,220	22	22	20	2	<	7
5AEB003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--	--	--	--	--	--	--	--
5AEB004	4	62,03,31	161,00,46	HC-A5	0.01	19	16	18	1,020	1,020	1,150	14	10	6	<	<	12
5AEB005	5	62,03,33	161,00,52	HC-A5	0.03	15	16	18	800	950	1,310	12	14	12	<	<	11
5AEB006	6	62,03,38	160,59,32	HC-C4	0.01	27	23	22	1,760	1,440	1,110	34	18	14	6	<	10
5AEB007	7	62,03,42	160,59,10	HC-C4	0.01	24	20	21	1,120	940	1,000	16	8	8	<	<	5
5AEB008	8	62,03,41	160,59,00	HC-C4	0.06	64	51	38	280	620	860	146	124	114	<	<	11
5AEB009	9	62,03,01	160,56,14	HC-C4	0.01	60	51	30	410	530	680	4	6	4	<	<	13
5AEB010	10	62,01,43	161,02,01	HC-C5	0.02	41	32	26	270	600	810	16	12	8	<	<	10
5AEB011	11	62,01,39	161,01,56	HC-C5	0.01	34	17	16	770	860	910	14	8	8	<	<	9
5AEB012	12	62,01,16	161,03,23	HC-C5	0.04	23	17	16	670	730	840	12	12	8	4	<	10
5AEB013	13	62,01,49	161,05,21	HC-C5	0.04	15	12	13	1,160	1,110	1,080	12	6	2	<	<	5
5AEB015	15	62,01,13	161,05,41	HC-C5	0.02	20	16	16	910	1,080	1,380	14	14	10	2	<	7
5AEB016	16	62,01,41	161,06,15	HC-C5	0.02	20	17	20	1,090	1,280	1,460	18	16	12	<	<	9
5AEB017	17	62,01,41	161,06,15	HC-C5	0.03	19	18	20	1,190	1,250	1,450	20	16	14	4	<	9
5AEB018	18	62,01,34	161,07,10	HC-C5	0.04	19	14	17	880	890	1,130	18	14	12	<	<	9
5AEB019	19	62,03,40	161,06,26	HC-C5	0.08	65	71	58	390	410	670	6	6	8	<	<	12
5AEB020	20	62,03,40	161,06,34	HC-C5	0.04	23	23	23	370	440	660	4	2	6	<	<	10
5AEB021	21	62,03,25	161,06,41	HC-C5	0.02	23	18	16	830	770	910	16	8	6	<	<	11
5AEB022	22	62,03,40	161,05,06	HC-C5	0.03	21	18	18	740	800	910	14	12	8	<	<	12
5AEB023	23	62,03,30	161,04,33	HC-C5	0.08	25	25	24	630	660	920	16	12	10	<	<	11
5AEB024	24	62,03,25	161,03,27	HC-C5	0.02	20	14	14	910	990	1,190	12	12	8	<	<	9
5AEB025	25	62,03,25	161,03,27	HC-C5	0.01	22	19	17	1,470	1,430	1,660	18	8	10	<	<	9
5AEB026	26	62,05,11	161,07,38	HC-C5	0.03	43	40	29	550	650	900	12	8	8	<	<	11
5AEB027	27	62,05,11	161,07,38	HC-C5	0.04	37	32	25	520	660	880	10	10	8	<	<	11
5AEB028	28	62,05,12	160,59,59	HC-C4	0.02	17	16	17	550	690	910	12	16	8	<	<	9
5AEB029	29	62,04,24	160,57,48	HC-C4	0.02	14	15	16	830	1,010	1,160	12	10	12	2	<	8
5AEB030	30	62,02,39	160,56,59	HC-C4	0.01	62	40	25	510	680	860	12	8	8	<	<	12
5AEB031	31	62,02,39	160,57,03	HC-C4	0.03	19	22	430	760	1,030	10	16	16	<	<	2	
5AEB032	32	62,02,32	160,56,35	HC-C4	0.04	59	56	43	390	470	620	10	8	<	<	<	11

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-200 mesh (%)	-80 mesh (ppm)	-200 mesh (%)	-30 mesh (ppm)	-80 mesh (ppm)	-200 mesh (%)	-30 mesh (ppm)	-80 mesh (ppm)	-200 mesh (%)	-30 mesh (ppm)	
5AEB033	33	62,00,57	160,57,35	HC-A4	0.04	52	21	19	500	700	780	8	8	<2	<2
5AEB034	34	62,00,50	161,00,34	HC-A5	0.03	52	59	51	380	520	820	8	10	12	<2
5AEB035	35	62,00,37	160,56,13	HC-A4	0.02	55	43	27	780	830	960	14	10	6	2
5AEB036	36	62,00,37	160,55,54	HC-A4	0.01	15	13	15	760	600	690	4	4	6	<2
5AEB037	37	62,03,63	161,02,28	HC-A5	0.03	11	13	15	950	1,270	1,560	8	14	14	<2
5AEB038	38	62,03,36	161,01,43	HC-A5	0.02	16	14	15	670	780	1,080	12	12	14	2
5AEB039	39	62,03,32	161,01,08	HC-A5	0.01	18	17	17	1,100	830	820	10	8	4	<2
5AEB040	40	62,03,36	161,01,05	HC-A5	0.02	20	19	18	840	750	730	12	6	6	<2
5AEB041	41	62,03,27	160,57,26	HC-A4	0.01	20	18	17	1,640	1,240	1,170	12	8	6	<2
5AEB042	42	62,03,27	160,57,24	HC-A4	0.01	42	32	25	850	880	1,210	8	14	14	<2
5AEB043	43	62,03,54	160,58,26	HC-A4	0.01	38	37	28	640	910	1,070	46	50	44	<2
1073	44	--	--	HC-A5	--	--	22	--	--	510	--	--	14	--	--

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion; parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-80 mesh Sc (ppm)	-200 mesh Sr (ppm)	-30 mesh Sr (ppm)	-80 mesh Ti (ppm)	-200 mesh Ti (ppm)	-30 mesh Ti (ppm)	-80 mesh Ti (ppm)	-200 mesh Ti (ppm)	-30 mesh V (ppm)	-80 mesh V (ppm)	-200 mesh V (ppm)		
5AEB001	1	62,03,32	161,00,17	HC-A5	7	4	24	35	32	0.10	0.11	0.08	<10	<10	113	95	70
5AEB002	2	62,03,22	161,01,00	HC-A5	6	5	40	33	30	0.15	0.12	0.10	<10	<10	140	91	75
5AEB003A	3A	62,03,33	161,00,25	HC-A5	5	4	23	26	0.09	0.09	0.08	<10	<10	112	80	72	
5AEB003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--	--	--	--	--	--	--	
5AEB004	4	62,03,31	161,00,46	HC-A5	8	6	45	37	32	0.16	0.13	0.10	<10	<10	141	99	85
5AEB005	5	62,03,33	161,00,52	HC-A5	11	10	55	70	78	0.19	0.21	0.16	<10	<10	136	140	140
5AEB006	6	62,03,38	160,59,32	HC-A4	7	6	24	21	22	0.09	0.09	0.08	<10	<10	166	121	82
5AEB007	7	62,03,42	160,59,10	HC-A4	4	4	33	26	29	0.07	0.06	0.07	<10	<10	79	45	48
5AEB008	8	62,03,41	160,59,00	HC-A4	10	8	23	36	36	0.12	0.13	0.11	<10	<10	122	114	94
5AEB009	9	62,03,01	160,56,14	HC-A4	11	7	28	30	26	0.16	0.14	0.10	<10	<10	181	145	101
5AEB010	10	62,01,43	161,02,01	HC-A5	8	7	49	63	60	0.17	0.20	0.14	<10	<10	167	159	126
5AEB011	11	62,01,39	161,01,56	HC-A5	5	5	41	25	23	0.18	0.12	0.12	<10	<10	108	66	62
5AEB012	12	62,01,16	161,03,23	HC-A5	7	5	71	58	37	0.24	0.21	0.13	<10	<10	145	101	74
5AEB013	13	62,01,49	161,05,21	HC-A5	3	3	25	23	23	0.14	0.10	0.10	<10	<10	72	55	55
5AEB015	15	62,01,13	161,05,41	HC-A5	5	4	37	41	35	0.20	0.16	0.11	<10	<10	85	74	70
5AEB016	16	62,01,41	161,06,15	HC-A5	7	6	38	42	38	0.23	0.21	0.14	<10	<10	133	131	107
5AEB017	17	62,01,41	161,06,15	HC-A5	7	6	42	45	44	0.24	0.21	0.14	<10	<10	135	126	105
5AEB018	18	62,01,34	161,07,10	HC-A5	7	6	53	47	42	0.27	0.22	0.14	<10	<10	130	113	92
5AEB019	19	62,03,40	161,06,26	HC-A5	11	11	53	60	61	0.20	0.22	0.18	<10	<10	212	208	216
5AEB020	20	62,03,40	161,06,34	HC-A5	9	9	74	68	66	0.20	0.20	0.15	<10	<10	163	155	156
5AEB021	21	62,03,25	161,06,41	HC-A5	8	6	107	84	56	0.25	0.18	0.12	<10	<10	127	96	74
5AEB022	22	62,03,40	161,05,06	HC-A5	9	7	104	76	52	0.31	0.23	0.14	<10	<10	156	122	90
5AEB023	23	62,03,30	161,04,33	HC-A5	6	4	48	39	38	0.24	0.16	0.12	<10	<10	141	86	62
5AEB024	24	62,03,25	161,03,27	HC-A5	7	5	93	79	52	0.20	0.16	0.11	<10	<10	151	130	111
5AEB025	25																
5AEB026	26	62,05,11	161,07,38	HC-A5	9	7	49	52	46	0.24	0.22	0.14	<10	<10	194	159	131
5AEB027	27	62,05,11	161,07,38	HC-A5	8	7	47	53	51	0.24	0.21	0.15	<10	<10	171	140	115
5AEB028	28	62,05,12	160,59,59	HC-A4	7	6	48	54	53	0.20	0.19	0.14	<10	<10	104	99	81
5AEB029	29	62,04,24	160,57,48	HC-A4	7	6	46	53	43	0.20	0.19	0.13	<10	<10	76	78	68
5AEB030	30	62,02,39	160,56,59	HC-A4	8	6	27	31	28	0.14	0.11	0.08	<10	<10	192	122	83
5AEB031	31	62,02,39	160,57,03	HC-A4	3	5	11	19	32	<0.01	0.02	0.05	<10	<10	39	54	68
5AEB032	32	62,02,32	160,56,35	HC-A4	11	9	33	41	43	0.13	0.16	0.13	<10	<10	231	208	179

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-80	-200	-30	-80	-200	-30	-80	-200	-30	-80	-200
				mesh Sc (ppm)	mesh Sc (ppm)	mesh Sr (ppm)	mesh Sr (ppm)	mesh Sr (ppm)	mesh Ti (ppm)	mesh Ti (ppm)	mesh Ti (ppm)	mesh Ti (ppm)	mesh V (ppm)	mesh V (ppm)	mesh V (ppm)
5AEB033	33	62,00,57	160,57,35	HC-A4	11	6	40	37	41	0.17	0.12	<10	<10	214	98
5AEB034	34	62,00,50	161,00,34	HC-A5	10	10	27	41	42	0.18	0.20	<10	<10	159	169
5AEB035	35	62,00,37	160,56,13	HC-A4	10	6	49	53	50	0.21	0.16	0.12	<10	<10	177
5AEB036	36	62,00,37	160,55,54	HC-A4	2	3	28	17	21	0.07	0.06	0.06	<10	<10	49
5AEB037	37	62,03,63	161,02,28	HC-A5	10	9	57	78	77	0.20	0.21	0.16	<10	<10	120
5AEB038	38	62,03,36	161,01,43	HC-A5	10	8	54	68	70	0.19	0.19	0.16	<10	<10	153
5AEB039	39	62,03,32	161,01,08	HC-A5	4	4	34	24	26	0.11	0.08	0.09	<10	<10	72
5AEB040	40	62,03,36	161,01,05	HC-A5	4	4	23	23	25	0.08	0.08	0.08	<10	<10	60
5AEB041	41	62,03,27	160,57,26	HC-A4	6	4	23	23	23	0.02	0.04	0.05	<10	<10	122
5AEB042	42	62,03,27	160,57,24	HC-A4	6	6	20	22	27	0.08	0.10	0.09	<10	<10	120
5AEB043	43	62,03,54	160,58,26	HC-A4	8	7	20	27	32	0.10	0.11	0.10	<10	<10	105
1073	44			HC-A5	10	--	--	166	--	--	0.19	--	--	--	--

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-30 mesh W (ppm)	-80 mesh W (ppm)	-200 mesh W (ppm)	-30 mesh Zn (ppm)	-80 mesh Zn (ppm)	-200 mesh Zn (ppm)
5AEBb001	1	62,03,32	161,00,17	HC-A5	<10	<10	<10	350	266	188
5AEBb002	2	62,03,22	161,01,00	HC-A5	<10	<10	<10	102	70	66
5AEBb003A	3A	62,03,33	161,00,25	HC-A5	<10	<10	<10	156	126	102
5AEBb003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--
5AEBb004	4	62,03,31	161,00,46	HC-A5	<10	<10	<10	110	84	70
5AEBb005	5	62,03,33	161,00,52	HC-A5	<10	<10	<10	132	144	122
5AEBb006	6	62,03,38	160,59,32	HC-A4	<10	<10	<10	108	84	72
5AEBb007	7	62,03,42	160,59,10	HC-A4	<10	<10	<10	92	78	80
5AEBb008	8	62,03,41	160,59,00	HC-A4	<10	<10	<10	320	258	218
5AEBb009	9	62,03,01	160,56,14	HC-A4	<10	<10	<10	108	104	74
5AEBb010	10	62,01,43	161,02,01	HC-A5	<10	<10	<10	114	104	78
5AEBb011	11	62,01,39	161,01,56	HC-A5	<10	<10	<10	76	54	54
5AEBb012	12	62,01,16	161,03,23	HC-A5	<10	<10	<10	136	106	72
5AEBb013	13	62,01,49	161,05,21	HC-A5	<10	<10	<10	76	50	52
5AEBb015	15	62,01,13	161,05,41	HC-A5	<10	<10	<10	130	98	78
5AEBb016	16	62,01,41	161,06,15	HC-A5	<10	<10	<10	120	110	82
5AEBb017	17	62,01,41	161,06,15	HC-A5	<10	<10	<10	122	112	80
5AEBb018	18	62,01,34	161,07,10	HC-A5	<10	<10	<10	120	108	78
5AEBb019	19	62,03,40	161,06,26	HC-A5	<10	<10	<10	98	112	102
5AEBb020	20	62,03,40	161,06,34	HC-A5	<10	<10	<10	86	94	94
5AEBb021	21	62,03,25	161,06,41	HC-A5	<10	<10	<10	92	72	52
5AEBb022	22	62,03,40	161,05,06	HC-A5	<10	<10	<10	13*	112	80
5AEBb023	23	62,03,30	161,04,33	HC-A5	<10	<10	<10	132	128	112
5AEBb024	24	62,03,25	161,03,27	HC-A5	<10	<10	<10	128	74	44
5AEBb025	25	62,02,39	160,56,59	HC-A4	<10	<10	<10	154	120	86
5AEBb026	26	62,05,11	161,07,38	HC-A5	<10	<10	<10	130	120	94
5AEBb027	27	62,05,11	161,07,38	HC-A5	<10	<10	<10	108	100	76
5AEBb028	28	62,05,12	160,59,59	HC-A4	<10	<10	<10	108	112	80
5AEBb029	29	62,04,24	160,57,48	HC-A4	<10	<10	<10	78	82	64
5AEBb030	30	62,02,39	160,56,59	HC-A4	<10	<10	<10	116	96	72
5AEBb031	31	62,02,39	160,57,03	HC-A4	<10	<10	<10	74	94	106
5AEBb032	32	62,02,32	160,56,35	HC-A4	<10	<10	<10	112	118	98

Table 6, continued. Geochemical data for -35 mesh, -80 mesh, and -200 mesh stream-sediment samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 3; ppb, parts per billion, parts per million; <, less than the value shown; INS, insufficient sample for analyses; all samples were analyzed by Chemex Labs, Vancouver, BC, Canada]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	-30 mesh	-80 mesh	-200 mesh	-80 mesh	-200 mesh
				(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
SAEB033	33	62,00,57	160,57,35	HC-A4	<10	<10	<10	90	60
SAEB034	34	62,00,50	161,00,34	HC-A5	<10	<10	<10	102	116
SAEB035	35	62,00,37	160,56,13	HC-A4	<10	<10	<10	150	124
SAEB036	36	62,00,37	160,55,54	HC-A4	<10	<10	<10	56	58
SAEB037	37	62,03,63	161,02,28	HC-A5	<10	<10	<10	112	112
SAEB038	38	62,03,36	161,01,43	HC-A5	<10	<10	<10	120	108
SAEB039	39	62,03,32	16,01,08	HC-A5	<10	<10	<10	64	58
SAEB040	40	62,03,36	161,01,05	HC-A5	<10	<10	<10	78	72
SAEB041	41	62,03,27	160,57,26	HC-A4	<10	<10	<10	154	112
SAEB042	42	62,03,27	160,57,24	HC-A4	<10	<10	<10	124	110
SAEB043	43	62,03,54	160,58,26	HC-A4	<10	<10	<10	176	178
1073	44			HC-A5	--	<10	--	84	--



• Figure 4. Sample location map of panned-concentrate samples collected in the Stuyahok study area in 1995

Table 7. Geochemical data for panned-concentrate samples collected in the Stuyahok study area in 1995

[Map Number is number plotted on figure 4; ppb, parts per billion; ppm, parts per million; --, sample not collected or not analyzed; <, less than value shown]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	Au (ppb)	Ag (ppm)	As (ppm)	Co (ppm)	Cr (ppm)	Mo (ppm)	W (ppm)	Sb (ppm)
5AEb001	1	62,03,32	161,00,17	HC-A5	<10	<10	439	31	450	<5	<5	13
5AEb002	--	62,03,22	161,01,00	HC-A5	--	--	--	--	--	--	--	--
5AEb003A	3A	62,03,33	161,00,25	HC-A5	140	<10	11	<20	270	<5	<5	8
5AEb003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--	--	--
5AEb004	4	62,03,31	161,00,46	HC-A5	<10	<10	18	21	<100	<5	<5	5
5AEb005	5	62,03,33	161,00,52	HC-A5	<10	<10	15	21	170	<5	<5	2
5AEb006	6	62,03,38	160,59,32	HC-A4	250	<10	90	36	330	<5	<5	14
5AEb007	--	62,03,42	160,59,10	HC-A4	--	--	--	--	--	--	--	--
5AEb008	8	62,03,41	160,59,00	HC-A4	<10	<10	169	59	1,400	<5	<5	26
5AEb009	9	62,03,01	160,56,14	HC-A4	2,160	<10	14	41	11,000	<5	<5	2
5AEb010	10	62,01,43	161,02,01	HC-A5	81	<10	56	27	720	<5	<5	5
5AEb011	--	62,01,39	161,01,56	HC-A5	--	--	--	--	--	--	--	--
5AEb012	12	62,01,16	161,03,23	HC-A5	<10	<10	14	27	220	<5	<5	2
5AEb013	--	62,01,49	161,05,21	HC-A5	--	--	--	--	--	--	--	--
5AEb015	15	62,01,13	161,05,41	HC-A5	<10	<10	13	<20	<100	<5	<5	1
5AEb016	16	62,01,41	161,06,15	HC-A5	<10	<10	17	<20	<100	<5	<5	1
5AEb017	--	62,01,41	161,06,15	HC-A5	--	--	--	--	--	--	--	--
5AEb018	18	62,01,34	161,07,10	HC-A5	<10	<10	18	22	<100	<5	<5	1
5AEb019	19	62,03,40	161,06,26	HC-A5	<10	<10	29	34	4,200	<5	<5	<1
5AEb020	20	62,03,40	161,06,34	HC-A5	<10	<10	26	31	2,500	<5	<5	<1
5AEb021	21	62,03,25	161,06,41	HC-A5	<10	<10	14	23	350	<5	<5	<1
5AEb022	22			HC-A5	20	<10	17	24	300	<5	<5	1
5AEb023	23	62,03,40	161,05,06	HC-A5	<10	<10	15	28	430	<5	<5	1
5AEb024	24	62,03,30	161,04,33	HC-A5	<10	<10	16	24	170	<5	<5	2
5AEb025	25	62,03,25	161,03,27	HC-A5	<10	<10	22	21	<100	<5	<5	2
5AEb026	26	62,05,11	161,07,38	HC-A5	<10	<10	14	31	1,800	<5	<5	<1
5AEb027	--	62,05,11	161,07,38	HC-A5	--	--	--	--	--	--	--	--
5AEb028	28	62,05,12	160,59,59	HC-A4	<10	<10	14	<20	<100	<5	<5	1
5AEb029	29	62,04,24	160,57,48	HC-A4	<10	<10	13	<20	<100	<5	<5	1
5AEb030	30	62,02,39	160,56,59	HC-A4	<10	<10	86	31	2,100	<5	<5	4
5AEb031	31	62,02,39	160,57,03	HC-A4	<10	<10	81	<20	130	<5	<5	6
5AEb032	32	62,02,32	160,56,35	HC-A4	13	<10	15	40	2,800	<5	<5	2
5AEb033	33	62,00,57	160,57,35	HC-A4	<10	<10	14	42	4,700	<5	<5	3
5AEb034	34	62,00,50	161,00,34	HC-A5	<10	<10	10	55	4,900	<5	<5	3
5AEb035	35	62,00,37	160,56,13	HC-A4	<10	<10	39	42	760	<5	<5	3
5AEb036	--	62,00,37	160,55,54	HC-A4	--	--	--	--	--	--	--	--
5AEb037	37	62,03,63	161,02,28	HC-A5	<10	<10	18	<20	<100	<5	<5	1
5AEb038	38	62,03,36	161,01,43	HC-A5	<10	<10	16	26	180	<5	<5	3
5AEb039	--	62,03,32	161,01,08	HC-A5	--	--	--	--	--	--	--	--
5AEb040	--	62,03,36	161,01,05	HC-A5	--	--	--	--	--	--	--	--
5AEb041	41	62,03,27	160,57,26	HC-A4	32,700	<10	93	22	270	<5	<5	30
5AEb042	42	62,03,27	160,57,24	HC-A4	10	<10	40	28	1,000	<5	<5	9
5AEb043	43	62,03,54	160,58,26	HC-A4	965	<10	37	22	2,200	<5	<5	16

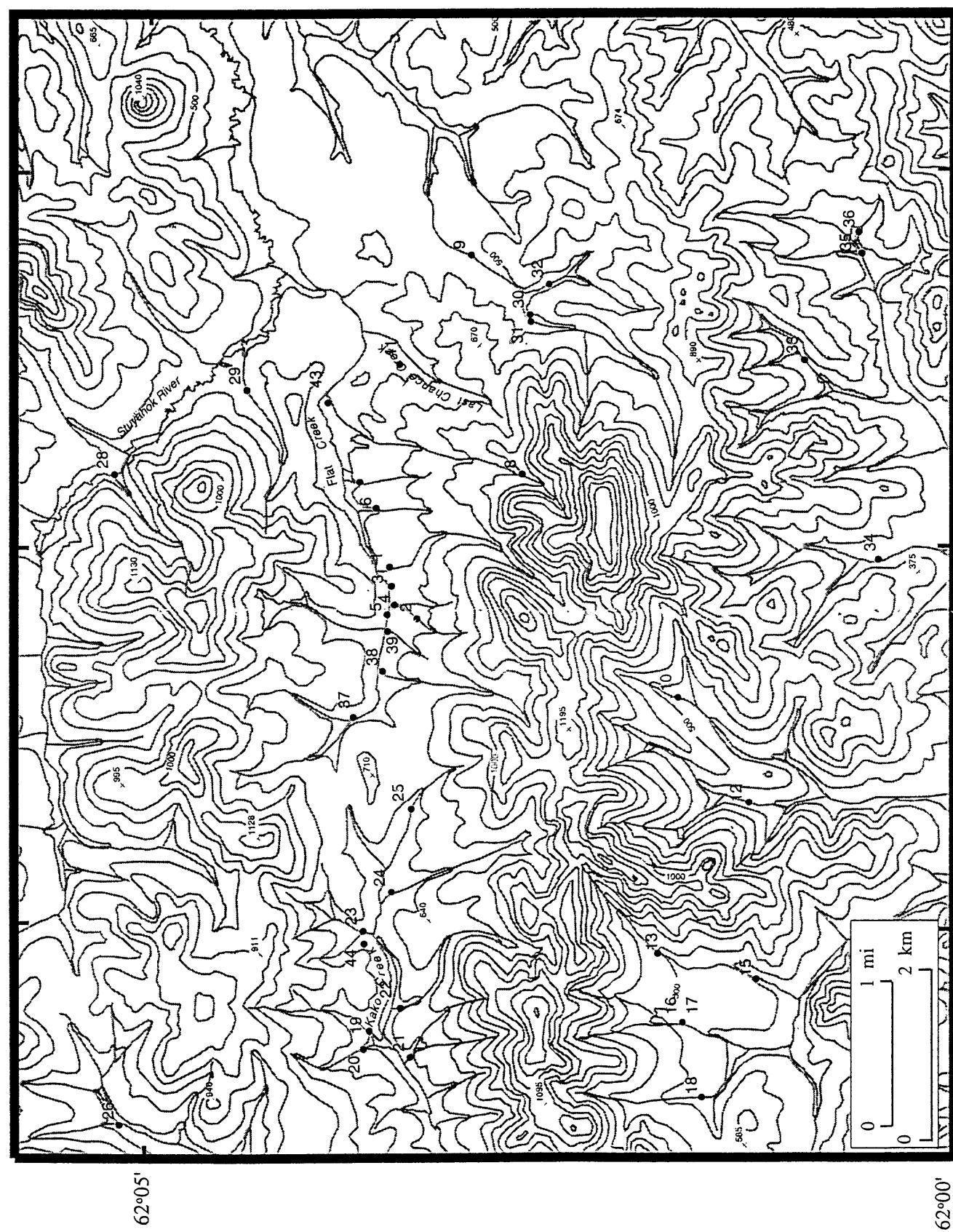


Figure 5. Sample location map for stream-water samples collected in the Stuyahok study area in 1995

Table 8. Geochemical data for stream-water samples collected from the Stuyahok study area in 1995

[Map Number is number plotted on figure 5; C, water temperature in degrees Celsius; mV, millivolts; Eh, oxidation-reduction potential;  $\mu\text{S}/\text{cm}$ , microSiemens per centimeter; mg/L, milligrams per liter; ND, not detected; --, sample not collected or not analyzed; anion analyses performed by Quanterra Environmental Services, Arvada, CO]

Sample Number	Map Number	Latitude (N)	Longitude (W)	1 inch=1 mile quadrangle (Holy Cross)	pH	Temp C	Eh (mV)	Conductivity ( $\mu\text{S}/\text{cm}$ )	Cl- (mg/L)	F- (mg/L)	SO4- (mg/L)
5AEb001	1	62,03,32	161,00,17	HC-A5	7.6	6	327	90	1.2	ND	7.4
5AEb002	2	62,03,22	161,01,00	HC-A5	7.9	4	330	55	3.7	ND	1.7
5AEb003A	3A	62,03,33	161,00,25	HC-A5	7.9	3	330	55	1.8	ND	1.7
5AEb003B	--	62,03,33	161,00,25	HC-A5	--	--	--	--	--	--	--
5AEb004	4	62,03,31	161,00,46	HC-A5	7.2	5	228	41	1.4	ND	1.4
5AEb005	5	62,03,33	161,00,52	HC-A5	8.5	--	313	55	1.2	ND	1.9
5AEb006	6	62,03,38	160,59,32	HC-A4	8.3	6.0	295	57	1.2	ND	2.1
5AEb007	7	62,03,42	160,59,10	HC-A4	7.9	6.9	300	58	1.2	ND	ND
5AEb008	8	62,03,41	160,59,00	HC-A4	8.2	3.5	365	110	1.2	ND	21.6
5AEb009	9	62,03,01	160,56,14	HC-A4	8.3	7.0	40	93	1.2	ND	1.6
5AEb010	10	62,01,43	161,02,01	HC-A5	8.2	3.2	290	120	1.2	ND	3.0
5AEb011	--	62,01,39	161,01,56	HC-A5	--	--	--	--	--	--	--
5AEb012	12	62,01,16	161,03,23	HC-A5	8.2	3.5	260	74	1.2	ND	2.7
5AEb013	--	62,01,49	161,05,21	HC-A5	--	--	--	--	--	--	--
5AEb015	15	62,01,13	161,05,41	HC-A5	8.2	3.3	225	69	1.2	ND	2.5
5AEb016	16	62,01,41	161,06,15	HC-A5	7.9	4.1	265	61	1.2	ND	2.0
5AEb017	17	62,01,41	161,06,15	HC-A5	--	--	--	--	1.2	ND	2.0
5AEb018	18	62,01,34	161,07,10	HC-A5	8.3	4.7	285	61	1.3	ND	3.0
5AEb019	19	62,03,40	161,06,26	HC-A5	8.2	6.2	210	110	1.3	ND	2.2
5AEb020	20	62,03,40	161,06,34	HC-A5	8.2	7.9	240	115	1.4	ND	1.9
5AEb021	21	62,03,25	161,06,41	HC-A5	7.7	6.6	155	75	1.3	ND	1.8
5AEb022	22			HC-A5	7.5	2.7	195	64	1.3	ND	2.5
5AEb023	23	62,03,40	161,05,06	HC-A5	7.5	4.3	235	84	172	0.11	3.0
5AEb024	24	62,03,30	161,04,33	HC-A5	7.8	3.9	235	60	1.4	ND	2.2
5AEb025	25	62,03,25	161,03,27	HC-A5	7.2	4.6	195	60	1.4	ND	1.2
5AEb026	26	62,05,11	161,07,38	HC-A5	8.0	5.1	185	101	1.3	ND	3.9
5AEb027	--	62,05,11	161,07,38	HC-A5	--	--	--	--	--	--	--
5AEb028	28	62,05,12	160,59,59	HC-A4	7.9	4.7	195	61	1.2	ND	2.0
5AEb029	29	62,04,24	160,57,48	HC-A4	7.4	4.5	195	66	1.2	ND	1.8
5AEb030	30	62,02,39	160,56,59	HC-A4	8.0	4.8	245	110	1.2	ND	1.7
5AEb031	31	62,02,39	160,57,03	HC-A4	7.1	6.4	255	83	1.2	ND	2.3
5AEb032	32	62,02,32	160,56,35	HC-A4	8.4	3.2	175	103	1.2	ND	1.3
5AEb033	33	62,00,57	160,57,35	HC-A4	8.2	5.7	170	112	1.3	ND	1.5
5AEb034	34	62,00,50	161,00,34	HC-A5	8.0	5.3	150	113	1.3	ND	1.9
5AEb035	35	62,00,37	160,56,13	HC-A4	7.9	3.4	90	109	1.2	ND	1.9
5AEb036	36	62,00,37	160,55,54	HC-A4	7.5	5.3	85	89	1.3	ND	3.4
5AEb037	37	62,03,63	161,02,28	HC-A5	7.3	3.3	210	68	1.2	ND	2.2
5AEb038	38	62,03,36	161,01,43	HC-A5	7.4	3.2	165	70	1.2	ND	1.9
5AEb039	39	62,03,32	161,01,08	HC-A5	7.4	6.8	195	57	1.2	ND	1.2
5AEb040	--	62,03,36	161,01,05	HC-A5	--	--	--	--	--	--	--
5AEb041	41	62,03,27	160,57,26	HC-A4	6.4	2.0	220	40	1.4	ND	1.8
5AEb042	42	62,03,27	160,57,24	HC-A4	7.4	4.1	165	84	--	--	--
5AEb043	43	62,03,54	160,58,26	HC-A4	7.7	4.8	105	93	1.2	ND	8.4

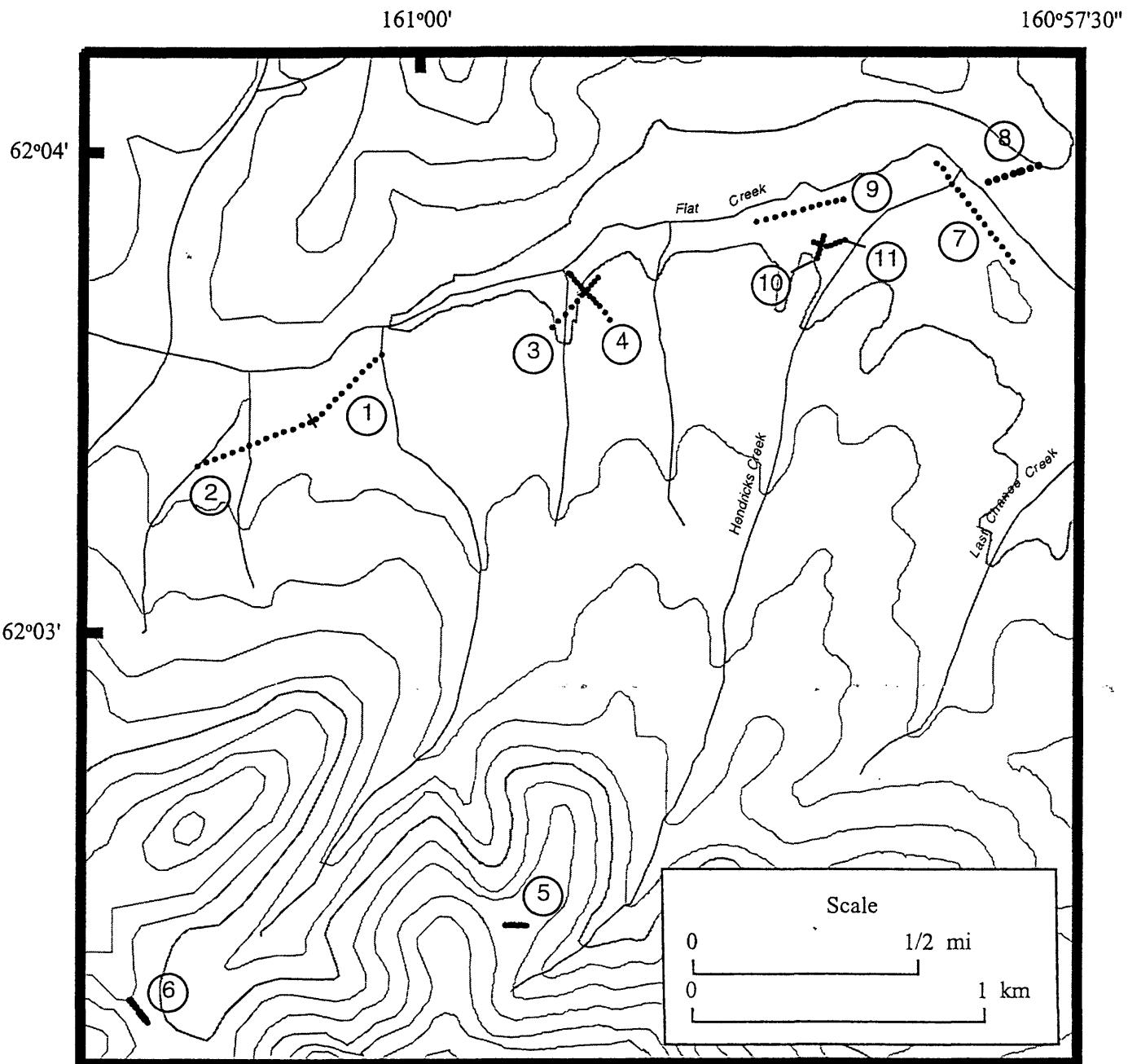


Figure 6. Sample location map for soil samples collected in the Stuyahok study area in 1995 (circled numbers refer to transect numbers listed in table 9 and in Appendix 2)

Table 9. Geochemical data for soil samples collected in the Stuyahok study area in 1995

[Transect Numbers are plotted on figure 6; ppb, parts per billion; ppm, parts per million; &lt;, less than the value shown; --, sample not collected or not analyzed; all samples analyzed by Chemex Labs, Vancouver, BC, Canada]

Transect Number	Sample Number	Au (ppb)	Ag (ppm)	Al (%)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	C <sub>o</sub> (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	Hg (ppb)	K (%)	L <sub>a</sub> (ppm)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)
1	1001	<5	<0.2	2.56	8	150	<5	<2	0.22	<5	12	33	28	3.09	80	0.09	10	0.57	395	1	0.02	32
1	1002	<5	<0.2	2.29	10	130	<5	<2	0.2	<5	7	23	17	2.62	80	0.09	10	0.44	375	<1	0.02	24
1	1003	<5	<0.2	2.36	12	150	<5	<2	0.21	<5	10	34	25	3.08	60	0.11	10	0.55	360	<1	0.01	27
1	1004	<5	<0.2	2.22	6	170	<5	<2	0.18	<5	10	29	26	3.03	50	0.1	10	0.46	410	<1	0.02	27
1	1005	<5	<0.2	2.19	2	100	<5	<2	0.12	<5	5	27	14	2.94	50	0.09	<10	0.41	235	<1	0.01	20
1	1006	<5	<0.2	2.6	10	150	<5	<2	0.16	<5	9	32	18	3.11	50	0.09	10	0.53	395	<1	0.01	22
1	1007	<5	<0.2	2.11	8	140	<5	<2	0.15	<5	10	30	20	2.71	50	0.08	10	0.48	390	<1	0.01	22
1	1008	<5	<0.2	2.43	6	140	<5	2	0.18	<5	5	31	20	2.71	60	0.1	10	0.45	165	<1	0.02	20
1	1009	<5	<0.2	1.83	2	190	<5	<2	0.25	<5	6	24	12	1.74	50	0.09	<10	0.33	105	<1	0.03	18
1	1010	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1	1011	<5	0.2	2.65	166	160	<5	<2	0.26	<5	10	29	26	2.54	120	0.08	10	0.57	315	<1	0.03	20
2	1012	<5	<0.2	2.71	2	230	0.5	<2	0.26	<5	11	41	32	3.26	70	0.17	10	0.58	425	1	0.02	30
2	1013	<5	<0.2	2.4	1	160	<5	<2	0.19	<5	7	28	17	2.76	60	0.09	10	0.43	285	<1	0.01	22
2	1014	<5	<0.2	2.6	1	150	<5	<2	0.18	<5	7	22	12	2.5	50	0.09	<10	0.33	585	1	0.04	18
2	1015	<5	<0.2	2.58	1	180	<5	<2	0.14	<5	11	29	20	2.85	60	0.09	10	0.4	680	1	0.02	23
2	1016	<5	<0.2	2.64	1	110	<5	<2	0.14	<5	6	20	14	2.7	70	0.09	<10	0.32	515	1	0.04	17
2	1017	<5	<0.2	2.49	12	130	0.5	<2	0.17	<5	11	28	16	2.89	50	0.08	10	0.47	720	<1	0.02	22
2	1018	<5	<0.2	2.71	16	170	<5	<2	0.22	<5	10	29	21	3.13	80	0.1	10	0.49	530	<1	0.02	23
2	1019	<5	<0.2	2.68	8	210	<5	<2	0.21	<5	7	31	21	2.88	60	0.11	10	0.48	410	<1	0.02	24
2	1020	<5	<0.2	2.46	6	170	<5	<2	0.18	<5	.9	32	22	2.85	50	0.11	10	0.47	300	<1	0.02	22
2	1021	<5	<0.2	2.47	1	160	<5	<2	0.18	<5	6	24	17	2.61	50	0.1	10	0.35	345	<1	0.03	18
2	1022	<5	<0.2	2.15	1	90	<5	<2	0.14	<5	4	12	9	2.36	70	0.04	<10	0.17	435	<1	0.03	10
2	1023	<5	<0.2	2.48	12	180	<5	<2	0.23	<5	12	39	27	3.2	50	0.13	10	0.61	385	<1	0.02	30
2	1024	<5	<0.2	2.36	8	110	<5	<2	0.18	<5	5	22	11	2.56	510	0.09	<10	0.34	265	<1	0.03	14
2	1025	<5	<0.2	2.51	12	170	0.5	<2	0.24	<5	13	37	27	3.31	60	0.14	10	0.61	410	<1	0.02	30
3	1030	<5	<0.2	2.4	16	130	<5	<2	0.2	<5	15	35	57	3.24	70	0.12	10	0.59	615	<1	0.01	35
3	1031	<5	<0.2	2.34	8	140	<5	<2	0.16	<5	.6	26	17	2.69	60	0.08	10	0.4	245	<1	0.02	19
3	1032	<5	<0.2	2.15	38	130	<5	<2	0.12	<5	8	27	25	3.69	80	0.08	<10	0.34	580	1	0.01	21
3	1033	<5	<0.2	2.38	1	140	<5	<2	0.17	<5	10	36	25	2.88	70	0.12	10	0.49	400	<1	0.01	29
3	1034	<5	<0.2	2.48	12	190	<5	<2	0.24	<5	13	37	49	2.61	60	0.12	10	0.6	435	<1	0.02	30
3	1035	<5	<0.2	2.16	8	130	<5	<2	0.21	<5	11	31	22	2.55	60	0.1	10	0.52	330	<1	0.01	27
3	1036	<5	<0.2	2.26	4	160	<5	<2	0.19	<5	6	32	20	3.01	70	0.1	10	0.44	200	<1	0.01	23
3	1037	<5	<0.2	2.37	1	170	<5	<2	0.2	<5	10	31	18	2.71	60	0.11	10	0.39	450	<1	0.02	20

Table 9, continued. Geochemical data for soil samples collected in the Stuyahok study area in 1995

[Transect Numbers are plotted on figure 6; ppb, parts per billion; ppm, parts per million; &lt;, less than the value shown; --, sample not collected or not analyzed; all samples analyzed by Chemex Labs, Vancouver, BC, Canada]

Transect Number	Sample Number	Au (ppb)	Ag (ppm)	Al (%)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (ppm)	Hg (ppb)	K (%)	La (ppm)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)
3	1038	<5	<0.2	2.67	8	190	<5	<2	0.21	<5	6	34	16	3.08	60	0.13	10	0.48	190	1	0.02	22
3	1039	<5	<0.2	2.38	6	140	<5	<2	0.2	<5	6	25	16	2.72	60	0.11	10	0.38	290	<1	0.03	21
3	1040	<5	<0.2	2.47	12	170	<5	<2	0.19	<5	12	29	12	3.66	50	0.09	10	0.42	800	1	0.02	16
3	1041	<5	<0.2	2.12	4	300	<5	<2	0.26	<5	9	32	29	2.66	50	0.12	10	0.53	325	<1	0.02	27
4	1042	<5	<0.2	2.49	8	160	<5	<2	0.22	<5	10	37	28	3.2	140	0.12	10	0.58	365	<1	0.02	29
4	1043	<5	<0.2	2.13	6	160	<5	<2	0.19	<5	10	32	25	2.77	50	0.1	10	0.53	300	<1	0.01	24
4	1044	<5	<0.2	2.29	4	160	<5	<2	0.19	<5	7	23	16	2.57	50	0.07	10	0.42	340	<1	0.02	20
4	1045	<5	<0.2	2.48	1	130	<5	<2	0.14	<5	4	18	9	2.82	60	0.07	10	0.25	295	<1	0.04	10
4	1046	<5	<0.2	2.25	6	150	<5	<2	0.17	<5	4	23	9	2.68	60	0.07	10	0.34	220	<1	0.02	14
4	1047	<5	<0.2	2.16	4	180	<5	<2	0.19	<5	6	29	13	2.77	70	0.1	10	0.41	220	<1	0.02	17
4	1048	<5	<0.2	2.43	28	110	<5	<2	0.16	<5	8	25	19	2.86	60	0.06	<10	0.5	355	<1	0.01	19
4	1049	<5	<0.2	2.51	12	130	<5	<2	0.19	<5	13	36	18	3.15	80	0.09	10	0.52	580	<1	0.01	22
4	1050	<5	<0.2	2.5	6	130	<5	<2	0.19	<5	12	34	16	3.1	110	0.1	10	0.49	650	<1	0.01	21
4	1051	<5	<0.2	2.4	6	120	<5	<2	0.18	<5	6	27	10	3.1	70	0.11	10	0.41	625	<1	0.02	15
4	1052	<5	<0.2	2.52	12	150	<5	<2	0.24	<5	8	35	20	3.28	100	0.11	10	0.54	255	<1	0.02	22
4	1053	<5	<0.2	2.63	18	150	<5	<2	0.24	<5	8	37	29	2.96	670	0.15	10	0.64	230	<1	0.01	29
5	1054	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
5	1055	<5	0.2	3.21	18	180	<5	4	0.22	<5	15	51	68	3.63	30	0.13	10	1.48	365	1	0.05	32
5	1056	<5	0.4	3.38	22	150	<5	4	0.15	<5	8	31	76	3.5	100	0.08	10	0.64	180	1	0.02	21
5	1057	<5	0.2	2.84	14	130	<5	2	0.14	<5	7	22	33	2.94	80	0.07	<10	0.43	220	1	0.02	15
5	1058	<5	<0.2	2.72	12	170	0.5	<2	0.15	<5	18	37	46	3.67	60	0.14	10	0.72	640	<1	0.01	30
5	1059	<5	<0.2	3.09	34	200	<5	38	0.18	<5	<20	51	65	4.1	130	0.1	10	1.07	535	<1	0.02	39
5	1060	<5	<0.2	3.29	28	240	0.5	<2	0.28	0.5	21	58	63	4.25	100	0.17	10	1.31	700	<1	0.03	41
5	1064	<5	<0.2	2.69	34	200	<5	<2	0.19	<5	22	48	62	3.82	120	0.11	10	1.06	730	<1	0.01	40
5	1061	<5	<0.2	3.29	16	170	<5	<2	0.24	0.5	27	69	77	3.89	110	0.13	10	1.58	620	<1	0.02	44
5	1062	<5	0.2	2.95	24	200	<5	<2	0.2	0.5	23	56	73	3.95	100	0.11	10	1.16	655	<1	0.01	38
5	1063	<5	<0.2	2.75	34	110	<5	<2	0.13	<5	14	37	63	3.51	120	0.08	<10	0.81	445	<1	0.01	26
6	1065	<5	0.2	3.09	128	120	<5	<2	0.24	<5	16	63	49	3.82	60	0.1	10	1.57	455	<1	0.01	44
6	1066	<5	0.4	3.48	218	150	<5	2	0.3	<5	22	92	46	4.72	50	0.09	<10	2.26	635	<1	0.02	57
6	1067	<5	<0.2	1.91	4	100	<5	<2	0.2	<5	2	5	7	1.43	50	0.02	<10	0.11	175	<1	0.06	7
6	1068	<5	<0.2	1.62	6	160	<5	<2	0.47	<5	5	23	20	1.72	70	0.06	<10	0.46	135	<1	0.02	18

Table 9, continued. Geochemical data for soil samples collected in the Stuyahok study area in 1995

(Transsect Numbers are plotted on figure 6; ppb, parts per billion; ppm, parts per million; &lt;, less than the value shown; -, sample not collected or not analyzed; all samples analyzed by Chemex Labs, Vancouver, BC, Canada)

Transsect Number	Sample Number	Au (ppb)	Ag (ppm)	Al (%)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	Hg (ppb)	K (%)	La (ppm)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)
6	1069	<5	0.2	3.07	196	110	<5	<2	0.18	<.5	13	68	35	3.88	80	0.1	<10	1.36	400	<1	0.01	43
6	1070	<5	0.4	2.9	170	100	<5	<2	0.16	<.5	16	64	37	3.97	50	0.08	<10	1.46	495	<1	0.01	43
6	1071	<5	0.4	3.02	186	170	<5	2	0.23	<.5	14	63	42	3.73	80	0.12	10	1.36	495	<1	0.02	45
6	1072	<5	2.6	3.1	848	130	<5	<2	0.17	1	19	67	49	4.57	80	0.07	<10	1.68	645	<1	0.01	48
7	1076	<5	<0.2	2.34	2	110	<5	<2	0.16	<.5	9	27	19	2.65	50	0.11	10	0.41	465	<1	0.02	19
7	1075	<5	<0.2	2.32	12	140	<5	<2	0.2	<.5	9	31	22	2.99	90	0.1	10	0.52	220	<1	0.01	22
7	1074	<5	<0.2	2.63	18	140	<5	<2	0.22	<.5	8	35	23	3.46	90	0.11	10	0.54	200	<1	0.01	24
7	1077	<5	<0.2	2.75	24	270	<5	<2	0.38	0.5	14	61	39	2.47	110	0.14	10	0.99	345	<1	0.02	34
7	1080	<5	<0.2	2.69	8	250	<5	<2	0.39	<.5	14	62	38	2.74	50	0.11	10	1.31	280	<1	0.02	36
7	1081	<5	<0.2	1.97	4	180	<5	<2	0.24	<.5	7	29	16	1.71	50	0.1	10	0.46	135	<1	0.03	16
7	1082	<5	<0.2	2.45	8	270	<5	<2	0.31	<.5	11	41	29	2.46	50	0.13	10	0.62	205	1	0.02	25
7	1083	<5	<0.2	1.96	6	220	<5	<2	0.24	<.5	6	23	18	1.37	50	0.08	10	0.42	115	<1	0.05	15
7	1084	<5	<0.2	2.35	1	250	<5	<2	0.26	<.5	5	25	22	1.68	50	0.13	10	0.42	120	<1	0.04	18
7	1085	<5	<0.2	2.27	8	290	<5	<2	0.29	<.5	10	43	29	3.04	60	0.1	10	0.58	295	1	0.01	24
7	1086	<5	<0.2	2.13	14	240	<5	<2	0.24	<.5	10	34	32	2.49	50	0.11	10	0.56	190	<1	0.01	21
7	1087	120	<2	2.09	16	280	<5	<2	0.27	<.5	11	38	24	2.63	60	0.1	10	0.47	220	<1	0.01	20
7	1088A	<5	<0.2	1.77	16	220	<5	<2	0.31	<.5	13	33	25	2.62	90	0.16	10	0.43	270	<1	0.02	19
7	1088B	185	<2	1.65	16	190	<5	<2	0.3	<.5	12	30	30	2.62	100	0.12	10	0.4	285	<1	0.01	19
7	1088B+	95	<2	1.56	10	190	<5	<2	0.33	<.5	9	29	24	2.03	110	0.14	20	0.35	195	<1	0.02	18
7	1089	<5	<0.2	2.09	12	190	<5	<2	0.19	<.5	10	31	22	2.56	60	0.11	10	0.44	300	<1	0.02	26
7	1090	230	<2	1.55	24	170	<5	<2	0.16	<.5	9	26	29	2.5	90	0.16	10	0.26	240	<1	0.01	18
8	1100	295	<2	2.33	6	90	<5	<2	0.13	<.5	5	18	11	2.56	40	0.07	<10	0.3	305	<1	0.03	11
8	1101	<5	<0.2	2.74	10	70	<5	<2	0.09	<.5	2	11	8	2.4	90	0.04	<10	0.18	140	<1	0.04	6
8	1102	<5	<0.2	2.78	8	140	<5	<2	0.23	<.5	7	27	13	2.97	60	0.1	10	0.37	325	<1	0.03	15
8	1103	<5	<0.2	2.48	6	120	<5	<2	0.14	<.5	8	15	18	3.07	80	0.07	<10	0.24	620	<1	0.04	13
8	1104	<5	<0.2	2.43	10	120	<5	<2	0.11	<.5	11	24	13	3.14	90	0.07	<10	0.34	510	<1	0.01	13
8	1105	<5	<0.2	2.31	8	100	<5	<2	0.1	<.5	10	23	13	2.74	50	0.07	10	0.33	460	<1	0.02	13
8	1106	<5	<0.2	2.22	20	150	<5	<2	0.12	<.5	8	20	22	3.8	130	0.09	<10	0.24	595	<1	0.02	14
8	1107	<5	<0.2	2.04	64	240	0.5	<2	0.28	<.5	19	34	40	4.99	240	0.12	10	0.54	1185	<1	0.01	27
9	1109	<5	<0.2	2.48	6	230	0.5	<2	0.24	<.5	11	36	28	3.11	40	0.13	10	0.58	445	<1	0.02	26
9	1110	<5	<0.2	2.3	12	130	<5	<2	0.2	<.5	9	32	23	2.58	90	0.1	10	0.52	400	<1	0.01	20

Table 9, continued. Geochemical data for soil samples collected in the Stuyahok study area in 1995

[Transect Numbers are plotted on figure 6; ppb, parts per billion; ppm, parts per million; &lt;, less than the value shown; --, sample not collected or not analyzed; all samples analyzed by Chemex Labs, Vancouver, BC, Canada]

Transect Number	Sample Number	Au (ppb)	Ag (ppm)	Al (%)	As (ppm)	Ba (ppm)	Be (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	Hg (ppb)	K (%)	La (ppm)	Mg (%)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)
9	1111	<5	<0.2	2.68	20	330	0.5	<2	0.3	<.5	11	55	41	4.02	50	0.16	10	0.82	380	<1	0.02	33
9	1112	<5	<0.2	2.44	14	250	0.5	<2	0.21	<.5	14	48	35	3.82	70	0.11	10	0.73	490	1	0.01	30
9	1113	<5	<0.2	2.74	22	210	<5	<2	0.22	<.5	13	46	39	3.57	350	0.1	10	0.87	465	<1	0.01	35
9	1114	<5	<0.2	2.74	22	170	<5	<2	0.2	<.5	17	64	41	3.94	60	0.09	10	1.09	625	1	0.01	43
9	1108	<5	<0.2	2.34	34	200	<5	<2	0.31	0.5	14	72	51	3.92	940	0.1	10	1.08	500	<1	0.01	34
9	1115	<5	<0.2	2.6	8	210	<5	<2	0.18	<.5	10	43	35	3.29	80	0.12	10	0.68	255	<1	0.02	28
9	1116	<5	<0.2	3.16	26	320	<5	<2	0.28	0.5	16	53	47	3.58	100	0.11	10	1.01	455	<1	0.02	33
9	1117	<5	<0.2	2.55	16	230	<5	<2	0.32	<.5	11	45	28	3.08	30	0.14	10	0.73	325	<1	0.02	27
9	1118	<5	<0.2	2.42	54	270	<5	<2	0.35	0.5	10	40	45	4.04	70	0.08	10	0.77	515	<1	0.02	22
10	1120	<5	<0.2	2.34	6	140	<5	<2	0.2	<.5	10	31	22	2.72	40	0.1	10	0.54	400	<1	0.02	25
10	1121	<5	<0.2	2.21	14	360	0.5	<2	0.32	<.5	11	42	26	2.75	50	0.1	10	0.61	245	1	0.01	27
10	1122	<5	<0.2	2.26	14	270	<5	<2	0.31	<.5	10	40	27	2.47	50	0.12	10	0.6	220	<1	0.02	28
10	1123	<5	<0.2	2.02	1	290	<5	2	0.33	<.5	9	33	27	2.28	30	0.14	10	0.53	260	<1	0.02	27
10	1124	<5	<0.2	2.32	2	300	0.5	<2	0.34	<.5	10	36	30	2.8	50	0.15	10	0.56	405	<1	0.02	26
10	1125	<5	<0.2	2.44	12	270	<5	<2	0.33	<.5	11	38	31	2.81	60	0.16	10	0.67	340	<1	0.02	28
11	1126	<5	<0.2	2.17	2	310	0.5	<2	0.33	<.5	10	34	32	2.89	40	0.16	10	0.59	440	<1	0.02	29
11	1127	<5	<0.2	2.07	6	330	<5	<2	0.4	0.5	10	35	30	2.14	60	0.13	10	0.68	200	<1	0.02	28
11	1128	<5	<0.2	1.92	1	270	<5	<2	0.32	<.5	9	34	30	2.4	40	0.12	10	0.53	255	<1	0.02	26
11	1129	<5	<0.2	2.38	10	320	<5	<2	0.39	<.5	9	38	33	2.44	40	0.16	10	0.72	220	<1	0.02	28
11	1130	<5	<0.2	2.19	10	320	0.5	<2	0.29	<.5	10	41	27	3.13	40	0.08	10	0.62	285	<1	0.01	26
11	1131	<5	<0.2	2.19	14	220	0.5	<2	0.25	<.5	14	40	27	3.13	40	0.09	10	0.62	425	1	0.01	26

Table 9, continued. Geochemical data for soil samples collected in the Stuyahok study area in 1995

[Transect Numbers are plotted on figure 6; ppb, parts per billion; ppm, parts per million; &lt;, less than the value shown; -, sample not collected or not analyzed; all samples analyzed by Chemex Labs, Vancouver, BC, Canada]

Transect Number	Sample Number	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Tl (%)	V (ppm)	Zn (ppm)
1	1001	860	8	<2	5	17	0.1	61	78
1	1002	750	6	<2	3	16	0.09	59	60
1	1003	770	8	<2	5	18	0.09	65	72
1	1004	660	8	<2	4	16	0.07	56	72
1	1005	700	8	<2	3	11	0.06	58	64
1	1006	780	8	<2	4	16	0.08	67	78
1	1007	700	8	<2	4	15	0.07	58	68
1	1008	810	8	88	4	15	0.07	61	68
1	1009	660	6	<2	2	19	0.06	52	54
1	1010	--	--	--	--	--	--	--	--
1	1011	820	38	<2	5	20	0.1	66	98
2	1012	760	8	<2	7	21	0.09	71	82
2	1013	790	6	<2	3	17	0.06	57	80
2	1014	710	8	<2	3	16	0.09	58	70
2	1015	870	12	2	4	13	0.07	59	68
2	1016	950	8	<2	4	12	0.11	59	58
2	1017	860	8	<2	4	15	0.09	68	70
2	1018	890	12	<2	5	20	0.09	72	64
2	1019	900	8	<2	5	17	0.08	66	72
2	1020	860	12	<2	4	14	0.08	61	66
2	1021	870	8	<2	3	16	0.08	58	58
2	1022	1040	4	<2	2	12	0.11	52	30
2	1023	810	8	2	5	19	0.08	67	84
2	1024	850	8	<2	3	16	0.09	58	44
2	1025	900	10	<2	6	21	0.09	65	78
3	1030	770	12	<2	5	17	0.08	69	82
3	1031	610	6	<2	4	16	0.08	62	50
3	1032	730	12	<2	4	10	0.06	70	70
3	1033	810	10	<2	5	14	0.06	59	80
3	1034	590	8	<2	5	19	0.09	66	82
3	1035	820	8	<2	3	16	0.07	57	68
3	1036	840	10	<2	4	14	0.06	58	66

Table 9, continued. Geochemical data for soil samples collected in the Stuyahok study area in 1995

[Transect Numbers are plotted on figure 6; ppb, parts per billion; ppm, parts per million; &lt;, less than the value shown; -, sample not collected or not analyzed; all samples analyzed by Chemex Labs, Vancouver, BC, Canada]

Transect Number	Sample Number	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (%)	V (ppm)	Zn (ppm)
3	1037	920	10	<2	4	16	0.07	61	62
3	1038	990	10	<2	3	18	0.07	67	62
3	1039	830	8	<2	3	15	0.08	57	62
3	1040	940	8	<2	3	18	0.09	66	60
3	1041	660	12	<2	6	20	0.07	61	74
4	1042	810	12	<2	6	19	0.08	67	70
4	1043	680	8	<2	5	17	0.06	59	64
4	1044	790	6	<2	4	17	0.08	57	62
4	1045	870	4	<2	4	14	0.11	68	44
4	1046	730	8	<2	3	16	0.08	64	48
4	1047	890	6	<2	3	18	0.06	62	58
4	1048	720	20	<2	3	12	0.08	61	68
4	1049	870	10	<2	4	16	0.07	64	74
4	1050	820	8	<2	4	18	0.08	68	72
4	1051	700	8	<2	3	17	0.1	75	56
4	1052	800	8	2	4	22	0.07	70	70
4	1053	860	10	<2	4	19	0.08	65	84
5	1054	--	--	--	--	--	--	--	--
5	1055	660	26	<2	6	23	0.09	88	86
5	1056	970	38	<2	4	22	0.09	64	62
5	1057	910	20	2	4	16	0.11	63	42
5	1058	650	16	<2	7	17	0.09	76	82
5	1059	540	16	2	9	17	0.07	96	102
5	1060	570	14	<2	9	25	0.1	105	130
5	1064	590	12	2	8	19	0.07	85	132
5	1061	540	22	<2	7	23	0.11	99	158
5	1062	530	18	2	8	19	0.09	92	184
5	1063	580	18	<2	6	12	0.08	78	140
6	1065	400	62	<2	8	14	0.08	87	126
6	1066	460	52	2	10	13	0.09	115	128
6	1067	830	2	2	3	16	0.15	39	12

Table 9, continued. Geochemical data for soil samples collected in the Stuyahok study area in 1995

[Transect Numbers are plotted on figure 6; ppb, parts per billion; ppm, parts per million; &lt;, less than the value shown; -- sample not collected or not analyzed; all samples analyzed by Chemex Labs, Vancouver, BC, Canada]

Transect Number	Sample Number	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (%)	V (ppm)	Zn (ppm)
6	1068	1140	6	<2	4	19	0.08	43	28
6	1069	430	64	<2	7	15	0.07	87	100
6	1070	400	74	2	6	13	0.06	85	136
6	1071	390	56	<2	9	18	0.07	83	96
6	1072	470	562	6	7	13	0.06	101	224
7	1076	970	8	<2	4	12	0.07	52	72
7	1075	870	8	<2	4	17	0.07	62	70
7	1074	820	12	<2	4	20	0.08	71	78
7	1077	510	26	<2	8	26	0.11	82	106
7	1080	510	30	2	8	26	0.12	90	108
7	1081	730	6	<2	4	20	0.08	54	54
7	1082	530	8	<2	6	27	0.1	68	74
7	1083	980	6	<2	4	20	0.09	54	52
7	1084	690	8	<2	5	20	0.1	59	60
7	1085	590	8	<2	6	26	0.08	67	72
7	1086	560	12	<2	6	21	0.07	61	74
7	1087	560	14	<2	6	22	0.08	70	72
7	1088A	660	20	<2	6	24	0.08	68	70
7	1088B	700	22	<2	6	19	0.08	64	72
7	1088B+	700	20	<2	4	21	0.09	59	64
7	1089	600	14	<2	4	16	0.08	62	66
7	1090	490	20	<2	5	14	0.03	53	72
8	1100	760	4	<2	3	12	0.1	57	50
8	1101	890	6	<2	4	10	0.16	58	22
8	1102	750	8	<2	4	17	0.09	68	60
8	1103	630	4	<2	6	11	0.09	62	52
8	1104	580	8	<2	4	12	0.09	67	54
8	1105	530	6	<2	4	12	0.08	59	50
8	1106	630	10	<2	6	12	0.07	65	74
8	1107	740	20	4	9	21	0.03	88	118
9	1109	690	8	<2	6	21	0.1	69	78

Table 9, continued. Geochemical data for soil samples collected in the Stuyahok study area in 1995

[Transect Numbers are plotted on figure 6; ppb, parts per billion; ppm, parts per million; &lt;, less than the value shown; -, sample not collected or not analyzed; all samples analyzed by Chemex Labs, Vancouver, BC, Canada]

Transect Number	Sample Number	P (ppm)	Pb (ppm)	Sb (ppm)	Sc (ppm)	Sr (ppm)	Ti (%)	V (ppm)	Zn (ppm)
9	1110	840	10	<2	4	16	0.08	62	76
9	1111	1040	22	2	8	22	0.09	78	100
9	1112	820	16	<2	8	18	0.09	74	84
9	1113	700	22	4	7	17	0.1	76	94
9	1114	720	36	<2	7	14	0.08	82	110
9	1108	570	32	4	9	19	0.09	88	132
9	1115	670	26	<2	7	14	0.09	74	92
9	1116	590	34	<2	8	22	0.12	91	130
9	1117	690	16	<2	6	26	0.1	74	82
9	1118	750	26	<2	9	20	0.11	91	102
10	1120	770	8	<2	4	16	0.08	62	68
10	1121	580	8	<2	7	26	0.08	73	80
10	1122	690	6	<2	6	26	0.09	70	74
10	1123	630	8	<2	6	24	0.08	59	74
10	1124	690	8	<2	6	24	0.09	65	76
10	1125	700	8	2	6	28	0.1	70	76
11	1126	700	8	<2	6	28	0.09	62	82
11	1127	690	10	<2	6	30	0.09	58	88
11	1128	640	8	<2	6	23	0.08	54	76
11	1129	660	12	<2	6	32	0.1	66	82
11	1130	580	10	<2	6	23	0.08	71	74
11	1131	720	16	<2	6	19.	0.08	71	80

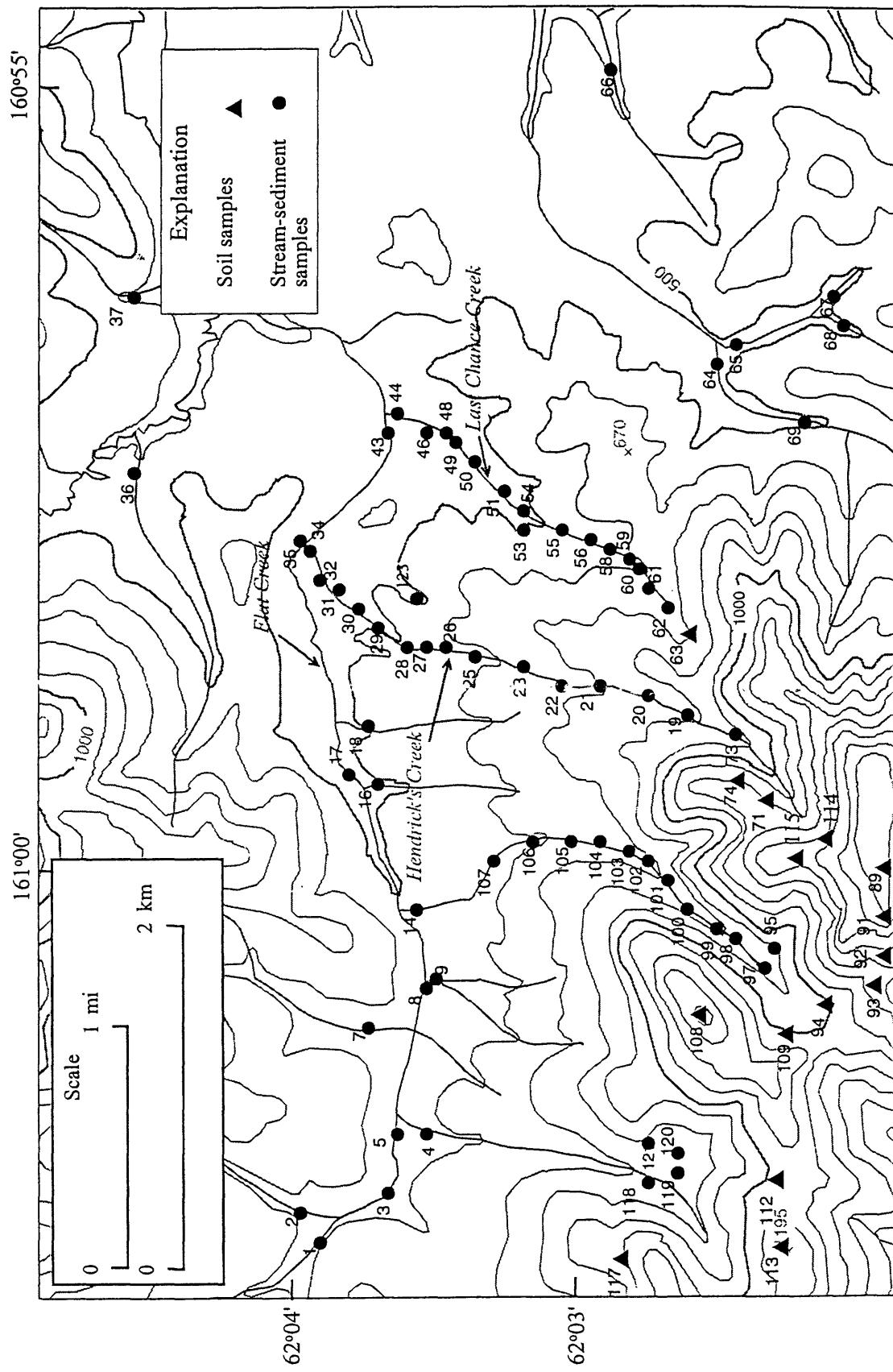


Figure 7. Sample location map for stream-sediment and soil samples from the Stuyahok study area collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975

Table 10. Geochemical data for stream-sediment and soil samples from the Stuyahok study area collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975

[Map Number is number plotted on figure 7; ss, stream-sediment; ppb, parts per billion; ppm, parts per million; --, sample not collected or not analyzed; <, less than the value shown]

Sample Number	Map Number	Sample Type	Au (ppm)	Ag (ppm)	As (ppm)	Cu (ppm)	Hg (ppb)	Mo (ppm)	Pb (ppm)	Zn (ppm)
2670	69	ss	<0.1	--	<10	19	--	1	10	62
2671	67	ss	<0.1	--	<10	18	--	1	10	72
2672	68	ss	<0.1	--	<10	40	--	--	20	110
2673	66	ss	<0.1	--	<10	13	--	1	10	78
2675	26	ss	<0.1	--	<10	27	--	1	20	86
2195	95	ss	<0.1	1.1	40	34	--	--	79	107
2196	97	ss	<0.1	0.8	195	19	--	--	24	52
2197	98	ss	<0.1	1	135	27	--	--	52	79
2198	99	ss	<0.1	0.7	125	20	--	--	37	60
2199	100	ss	<0.1	0.9	160	24	--	--	43	74
2200	101	ss	--	0.9	170	22	--	--	57	62
2230	73	ss	--	0.8	38	--	--	--	--	87
2231	19	ss	--	0.9	50	45	--	--	--	160
2232	20	ss	--	1	75	44	--	--	--	130
2233	21	ss	--	0.8	<5	37	--	--	--	92
2234	22	ss	--	0.4	5	31	--	--	--	85
2235	23	ss	--	0.7	10	32	--	--	--	92
2236	25	ss	--	0.5	10	33	--	--	--	98
2237	27	ss	--	0.8	15	29	--	--	--	75
2238	29	ss	--	0.7	15	28	--	--	--	101
2239	30	ss	--	0.7	<5	26	--	--	--	83
2240	31	ss	--	0.5	10	23	--	--	--	81
2241	32	ss	--	0.4	5	28	--	--	--	89
2242	34	ss	--	0.6	20	32	--	--	--	104
2243	35	ss	--	--	5	22	--	--	--	68
2384	62	ss	--	0.9	30	20	--	--	19	--
2385	61	ss	--	0.8	5	23	--	--	16	--
2386	60	ss	--	0.7	<5	24	--	--	16	--
2387	59	ss	--	0.6	<5	26	--	--	12	--
2388	58	ss	20	0.6	<5	19	--	--	12	--
2390	56	ss	6	0.5	15	19	--	--	0.5	--
2391	55	ss	6	0.6	20	19	--	--	12	--
2392	53	ss	8	0.8	10	27	--	--	24	--
2393	54	ss	11	0.7	15	18	--	--	25	--
2394	51	ss	6	0.7	10	22	--	--	20	--
2395	50	ss	--	0.8	25	26	--	--	29	--
2396	49	ss	6	0.6	10	17	--	--	19	--
2397	46	ss	--	0.6	5	22	--	--	22	--
2398	44	ss	--	0.7	<5	25	100	--	17	--
2401	102	ss	--	0.8	280	28	--	--	57	104
2402	103	ss	--	1.2	240	29	--	--	63	95
2403	104	ss	--	1	235	30	--	--	62	84
2404	105	ss	--	1.3	150	29	--	--	58	123
2405	106	ss	--	0.7	180	23	--	--	39	91

Table 10. Geochemical data for stream-sediment and soil samples from the Stuyahok study area collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975

[Map Number is number plotted on figure 7; ss, stream-sediment; ppb, parts per billion; ppm, parts per million; --, sample not collected or not analyzed; <, less than the value shown]

Sample Number	Map Number	Sample Type	Au (ppm)	Ag (ppm)	As (ppm)	Cu (ppm)	Hg (ppb)	Mo (ppm)	Pb (ppm)	Zn (ppm)
2406	107	ss	--	0.9	305	24	--	--	43	100
7805	1	ss	<0.1	--	<10	16	60	1	18	66
7806	2	ss	<0.1	0.9	<10	15	20	1	15	64
7807	3	ss	<0.1	--	<10	16	40	1	14	68
7808	5	ss	<0.1	--	<10	18	30	1	16	70
7810	4	ss	--	--	<10	12	40	1	10	40
7811	8	ss	<0.1	--	<10	8	30	1	10	36
7812	9	ss	<0.1	--	<10	25	70	<1	29	76
7816	14	ss	28	1.3	350	24	40	<1	40	124
7817	16	ss	--	--	<10	16	40	<1	16	62
7818	18	ss	--	--	<10	17	40	<1	14	62
7819	28	ss	--	--	10	25	40	<1	36	98
7820	123	ss	--	--	<10	21	60	<1	12	60
7830	118	ss	--	--	<10	20	30	1	18	56
7831	119	ss	--	--	<10	17	30	1	12	40
7832	120	ss	--	--	<10	17	60	2	14	46
7833	121	ss	--	--	<10	11	--	--	18	54
7835	7	ss	--	--	<10	20	--	2	15	71
8623	36	ss	10	--	<10	17	<20	2	21	65
8627	37	ss	<0.1	--	<10	13	50	1	17	58
8628	48	ss	<0.1	--	<10	17	20	1	14	61
8629	65	ss	<0.1	--	<10	16	20	1	15	56
8630	64	ss	31	--	<10	17	--	1	15	59
2383	63	soil	0.6	14	30	--	--	--	15	--
2652	87	soil	<0.1	--	<10	33	--	1	12	70
2653	88	soil	<0.1	--	<10	74	--	--	96	168
2654	89	soil	<0.1	--	<10	25	--	--	14	64
2656	91	soil	<0.1	--	<10	25	--	1	12	54
2657	92	soil	<0.1	--	<10	44	--	1	8	82
2658	93	soil	<0.1	--	<10	30	--	1	18	60
2659	94	soil	<0.1	--	<10	50	--	1	15	64
2660	109	soil	<0.1	--	<10	29	--	2	15	68
2662	108	soil	<0.1	--	<10	23	--	1	15	60
2664	112	soil	<0.1	--	<10	20	--	2	15	50
2665	113	soil	<0.1	--	<10	26	--	1	20	50
2666	115	soil	<0.1	--	<10	30	--	1	15	46
2667	114	soil	<0.1	--	<10	20	--	1	15	62
2669	117	soil	<0.1	--	<10	20	--	1	15	56
7843	71	soil	--	--	<10	29	--	1	27	112
7845	74	soil	--	--	60	48	--	--	140	350

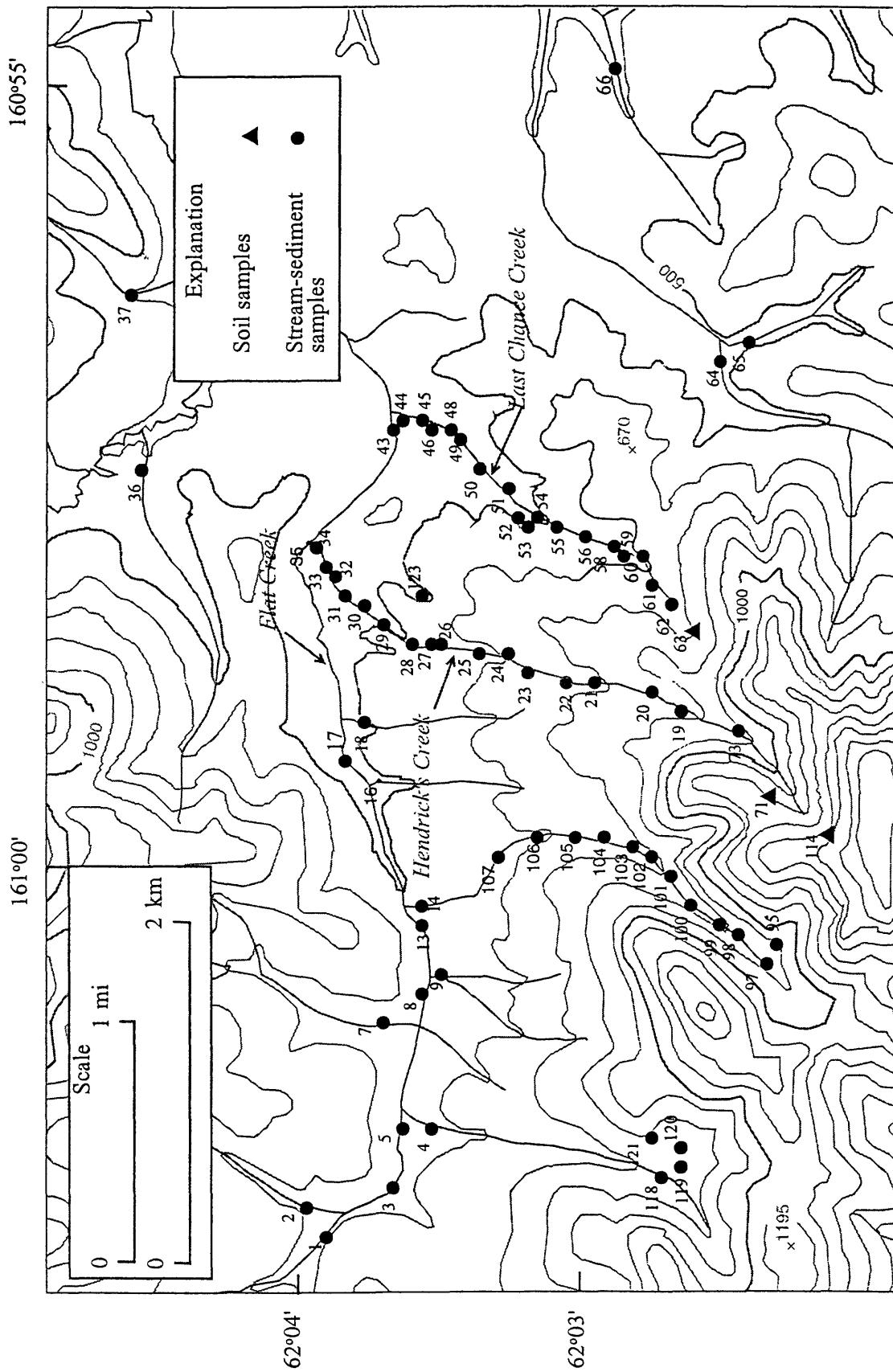


Figure 8. Sample location map for stream-sediment and soil samples from the Stuyahok study area originally collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 and re-analyzed by Bondar-Clegg in 1989

Table 11. Geochemical data for stream-sediment and soil samples from the Stuyahok study area originally collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 and re-analyzed by Bondar-Clegg in 1989

[Map number is number plotted on figure 8; ppb, parts per billion; ppm, parts per million; ss, stream-sediment; < less than the value shown; > greater than the value shown; INS, insufficient sample for analysis]

Sample Number	Map Number	Map Type	Sample Type	Au (ppb)	Ag (ppm)	As (ppm)	Bi (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Mn (ppm)	Mo (ppm)	Ni (ppm)	Pb (ppm)	Sb (ppm)	Se (ppm)	W (ppm)	Zn (ppm)	Hg (ppm)	Ba (ppm)
2195	95	ss	<5	0.6	127	18	11	34	34	413	2	23	80	23	<5	<10	125	165	740	
2196	97	ss	<5	0.2	281	15	8	23	18	467	<1	15	19	22	<5	<10	66	50	700	
2197	98	ss	<5	0.4	221	16	9	27	23	498	1	19	41	23	<5	<10	87	150	740	
2198	99	ss	<5	0.4	240	15	9	26	22	475	2	18	35	25	9	<10	85	80	720	
2199	100	ss	<5	0.3	247	16	9	26	23	568	2	18	37	25	<5	<10	88	95	730	
2200	101	ss	<5	0.4	268	17	9	25	22	514	2	16	46	23	<5	<10	88	90	720	
2230	73	ss	<5	0.5	78	18	10	34	39	422	3	23	87	24	7	<10	126	130	800	
2231	19	ss	<5	0.6	148	19	14	45	48	554	2	28	108	24	8	<10	216	140	760	
2232	20	ss	<5	0.7	160	16	13	45	42	474	3	27	98	26	<5	<10	166	100	740	
2233	21	ss	5	0.7	76	12	7	35	33	172	2	20	89	21	<5	<10	117	100	660	
2234	22	ss	<5	0.4	93	18	12	40	32	604	3	27	61	27	14	<10	126	70	780	
2235	23	ss	<5	0.3	101	16	13	41	29	487	2	26	56	21	9	<10	113	30	800	
2236	25	ss	<5	0.2	127	19	17	52	35	678	2	30	62	30	9	<10	125	80	770	
2237	27	ss	INS	0.2	67	10	6	18	15	189	1	13	28	14	<5	<10	56	INS	840	
2238	29	ss	<5	0.3	78	15	11	34	26	513	1	23	41	18	11	<10	130	40	830	
2239	30	ss	<5	0.3	53	12	8	30	23	202	1	23	35	16	<5	<10	106	130	840	
2240	31	ss	<5	<0.2	104	18	13	34	22	475	2	23	28	23	<5	<10	111	70	900	
2241	32	ss	36	0.2	106	21	18	40	27	764	2	26	32	28	<5	<10	109	50	900	
2242	34	ss	<5	<0.2	116	22	21	42	29	939	2	27	35	24	<5	<10	121	80	880	
2243	35	ss	<5	<0.2	81	14	11	27	20	457	2	18	9	21	<5	<10	88	90	870	
2384	62	ss	<5	<0.2	83	11	6	25	15	328	1	14	9	17	25	<10	43	40	720	
2385	61	ss	6	<0.2	65	16	11	36	20	478	2	23	7	21	<5	<10	62	50	720	
2386	60	ss	<5	<0.2	74	12	10	35	21	318	<1	24	<2	17	<5	<10	61	50	740	
2387	59	ss	<5	<0.2	43	9	9	23	20	344	1	21	2	11	<5	<10	57	60	800	
2388	58	ss	20	<0.2	57	12	9	31	17	278	<1	22	2	15	<5	<10	56	40	720	
2390	56	ss	6	<0.2	82	14	10	34	18	337	1	24	3	18	<5	<10	61	40	750	
2391	55	ss	6	<0.2	73	11	8	29	16	263	<1	20	2	20	<5	<10	58	75	730	
2392	53	ss	8	<0.2	86	15	13	24	22	556	2	19	4	20	<5	<10	67	100	990	
2393	54	ss	11	<0.2	66	12	8	25	15	169	1	18	<2	12	<5	<10	55	50	810	
2394	51	ss	6	<0.2	71	13	10	28	19	239	1	20	4	18	<5	<10	66	65	820	
2395	50	ss	6	<0.2	128	21	16	34	24	495	1	24	3	25	<5	<10	88	100	830	
2396	49	ss	6	<0.2	73	11	10	24	15	424	1	18	18	17	<5	<10	60	80	810	

Table 11. Geochemical data for stream-sediment and soil samples from the Stuyahok study area originally collected and analyzed by Resource Associates of Alaska, Inc. (RAA) in 1974 and 1975 and re-analyzed by Bondar-Clegg in 1989

[Map number is number plotted on figure 8; ppb, parts per billion; ppm, parts per million; ss, stream-sediment; <, less than the value shown; >, greater than the value shown; INS, insufficient sample for analysis]

Sample Number	Map Number	Sample Type	Au (ppb)	Ag (ppm)	As (ppm)	Bi (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Mn (ppm)	Mo (ppm)	Ni (ppm)	Pb (ppm)	Sb (ppm)	Se (ppm)	W (ppm)	Zn (ppm)	Hg (ppb)	Ba (ppm)
2397	46	ss	<5	<0.2	80	16	14	30	20	396	1	22	<2	22	<5	<10	76	70	850
2398	44	ss	<5	<0.2	70	13	13	33	21	332	<1	26	3	18	12	<10	77	100	890
2401	102	ss	INS	0.2	348	17	12	25	26	824	2	21	48	24	<5	<10	121	60	760
2402	103	ss	<5	0.2	298	17	10	25	26	535	1	19	48	18	<10	109	50	800	
2403	104	ss	<5	0.2	263	15	9	22	28	457	1	16	47	19	<5	<10	109	80	770
2404	105	ss	<5	0.5	334	14	9	23	27	497	<1	16	43	18	<5	<10	152	60	800
2405	106	ss	<5	0.3	264	13	9	23	24	455	<1	17	33	17	<5	<10	135	90	780
2406	107	ss	INS	0.3	325	12	8	21	21	366	<1	15	28	14	<5	<10	119	70	770
7805	1	ss	INS	<0.2	46	11	7	15	15	365	1	14	11	18	<5	<10	60	105	760
7806	2	ss	<5	<0.2	38	7	7	14	14	244	<1	15	11	12	<5	<10	56	300	800
7807	3	ss	<5	<0.2	40	10	8	16	14	342	1	14	12	12	<5	<10	61	170	760
7808	5	ss	INS	<0.2	46	13	7	14	15	335	2	14	9	15	<5	<10	60	130	770
7810	4	ss	<5	0.3	43	8	7	16	18	272	1	16	10	15	<5	<10	57	270	820
7811	8	ss	<5	<0.2	44	13	7	14	15	292	1	15	10	13	<5	<10	59	80	760
7812	9	ss	INS	INS	INS	14	9	17	17	INS	INS	INS	INS	INS	INS	INS	INS	INS	INS
7816	14	ss	28	<0.2	364	14	9	17	22	366	<1	16	80	18	<5	<10	131	2050	730
7817	16	ss	<5	<0.2	31	12	10	16	15	489	<1	16	20	12	<5	<10	64	2400	860
7818	18	ss	<5	<0.2	41	12	9	18	17	516	<1	18	11	12	<5	<10	65	1650	860
7819	28	ss	<5	0.3	58	12	9	23	22	315	<1	18	34	16	<5	<10	97	1400	850
7820	123	ss	<5	<0.2	32	9	6	12	18	207	1	16	14	14	7	<10	54	900	740
7830	118	ss	INS	<0.2	23	15	8	16	15	501	1	13	12	14	<5	<10	56	1900	770
7831	119	ss	INS	<0.2	28	11	5	13	15	389	1	12	13	12	<5	<10	43	4300	610
7832	120	ss	<5	<0.2	29	12	7	16	14	432	2	14	13	13	6	<10	50	900	730
7833	121	ss	<5	<0.2	33	13	7	14	13	472	2	13	12	14	16	<10	52	435	740
7835	7	ss	<5	<0.2	39	13	8	18	18	343	<1	16	12	13	8	<10	67	450	960
8623	36	ss	10	<0.2	38	16	10	19	15	496	2	17	9	16	18	<10	66	30	750
8627	37	ss	<5	<0.2	35	11	7	17	11	259	<1	14	8	12	<5	<10	58	45	740
8628	48	ss	<5	<0.2	53	15	10	23	15	330	<1	19	12	15	<5	<10	64	200	770
8629	65	ss	<5	<0.2	50	14	9	39	16	228	<1	22	8	16	7	<10	63	50	710
8630	64	ss	<5	<0.2	65	17	9	36	19	268	1	23	6	19	10	<10	64	50	730
2383	63	soil	<5	<0.2	77	12	4	20	12	126	1	12	8	15	<5	<10	34	40	710
7843	71	soil	INS	0.4	60	17	8	20	32	281	2	18	23	17	<5	<10	108	570	740

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